مراجعات النـــخبة

بنك الأسئلة

Math Final Review 2025

مراجعات النخبة

Math



6th
Primary
Second Term

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First Question: Choose the right answer:

1 $\frac{5}{6} \div \frac{1}{3} = \ldots\ldots$

ⓐ $\frac{5}{2}$ ⓑ $1\frac{1}{4}$
ⓒ $\frac{3}{2}$ ⓓ $\frac{4}{5}$

2 The reciprocal of the number …… is $\frac{5}{8}$

ⓐ $\frac{3}{8}$ ⓑ $\frac{5}{8}$
ⓒ $3\frac{1}{5}$ ⓓ $1\frac{3}{5}$

3 $5.2 \times 0.3 = \ldots\ldots$

ⓐ 0.156 ⓑ 1.56
ⓒ 15.6 ⓓ 156

4 $45 \div 0.9 = \ldots\ldots \div 9$

ⓐ 0.45 ⓑ 450
ⓒ 45 ⓓ 4.5

5 $\frac{2}{5}$ of $30 = \ldots\ldots$

ⓐ 12 ⓑ 2
ⓒ 6 ⓓ 30

6 The reciprocal of $\frac{1}{5}$ is ……

ⓐ 10 ⓑ 5
ⓒ 0 ⓓ $\frac{2}{5}$

7 How many halves are there in 2?

ⓐ 4 ⓑ 6
ⓒ 8 ⓓ 10

8 $72.3 \div 0.01 = ...$

ⓐ 7.230 ⓑ 0.723

ⓒ 723 ⓓ 72.3

9 4.26×0.14 ...... 42.6×0.014

ⓐ $>$ ⓑ $<$

ⓒ $=$ ⓓ $\leq$

10 If you need to buy 1.5 kilograms of apples for your mother at a cost of 32.5 LE per kilogram, how much would you pay?

ⓐ 4875 L.E ⓑ 48.75 L.E

ⓒ 487.5 L.E ⓓ 4.875 L.E

11 $3.6 \div 0.12 = ...$

ⓐ 30 ⓑ 3

ⓒ 0.3 ⓓ 0.03

12 $\frac{2}{5} \div \frac{4}{15} = ...$



ⓐ $\frac{4}{5}$ ⓑ $\frac{2}{15}$

ⓒ $\frac{2}{3}$ ⓓ $1\frac{1}{2}$

13 The reciprocal of 5 is ......

ⓐ $\frac{1}{5}$ ⓑ $\frac{3}{5}$

ⓒ $\frac{5}{5}$ ⓓ 5

14 $1.5 \times$ .... $= 150$

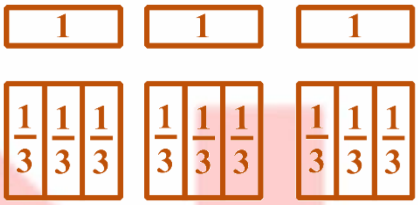
ⓐ 0.1 ⓑ 1000

ⓒ 100 ⓓ 10

15 $\ldots\ldots \div 0.3 = 12 \div 3$

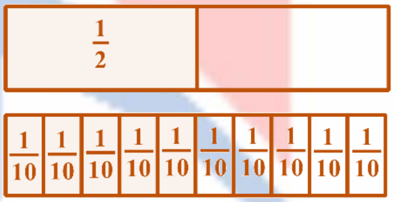
ⓐ 0.12 ⓑ 1.2
ⓒ 12 ⓓ 120

16 By using the opposite model what is the quotient of $3 \div \frac{2}{3}$?



ⓐ 2 ⓑ $\frac{3}{2}$
ⓒ $4\frac{1}{2}$ ⓓ $\frac{2}{3}$

17 You can use the opposite model to solve the problem.



ⓐ $\frac{1}{10} \div \frac{1}{2}$ ⓑ $\frac{1}{10} \div 5$
ⓒ $\frac{1}{2} \div 5$ ⓓ $\frac{1}{2} \div 10$

18 $\frac{7}{9} \times 3 \ldots\ldots \frac{7}{9} \div \frac{1}{3}$

ⓐ $>$ ⓑ $<$
ⓒ $=$ ⓓ Otherwise

19 $1.2 \times 1.2 = \ldots\ldots$

ⓐ 144 ⓑ 14.4
ⓒ 1.44 ⓓ 0.144

20 $6 \div \frac{2}{3} = \ldots\ldots$

ⓐ 4 ⓑ $\frac{1}{4}$
ⓒ 9 ⓓ $\frac{1}{9}$

I ❤ Maths

$\sqrt{16}$ Ever

21 $\frac{3}{5} \div \ldots\ldots = 1$

ⓐ $\frac{5}{3}$ ⓑ $\frac{5}{5}$

ⓒ $\frac{3}{5}$ ⓓ 1

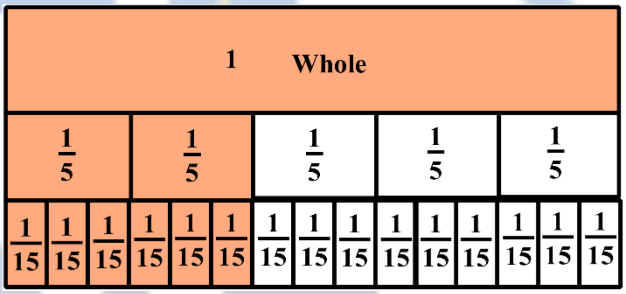
22 $\frac{3}{4} \div 2 = \ldots\ldots$

ⓐ $\frac{3}{8}$ ⓑ $\frac{6}{4}$

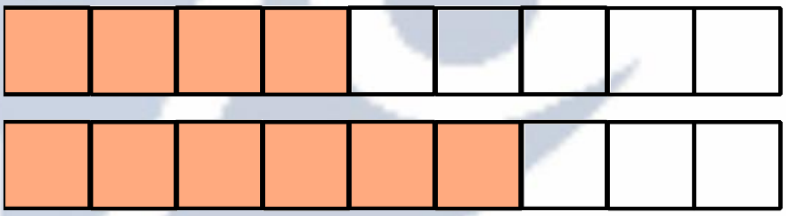
ⓒ $\frac{4}{6}$ ⓓ $\frac{3}{2}$

Second Question: Answer the following:

1 Divide using the forms shown:



ⓐ $\frac{2}{5} \div 3 = \ldots\ldots$



ⓑ $\frac{4}{9} \div \frac{2}{3} = \ldots\ldots$

2 A rectangle with an area of 10.25 square meters and a length of 4.1 m. Calculate the width and perimeter of the rectangle?

----

3 Omar covered $\frac{3}{5}$ kilometer in 3 laps.

What is the distance he covered in one Lap?

----

4 By using the modeling division find the quotient:

ⓐ $\frac{2}{3} \div 4$

ⓑ $\frac{3}{4} \div \frac{2}{5}$

5 Find:

ⓐ $4.48 \div 0.8$

ⓑ 14.3×5.3

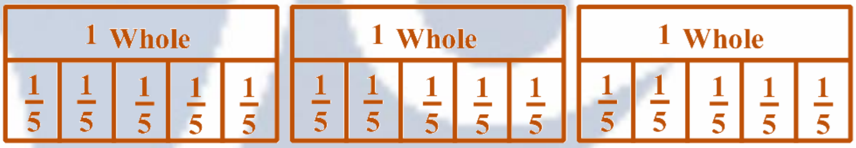
ⓒ $\frac{2}{3}$ of $\frac{3}{2}$

ⓓ $4 \div \frac{4}{3}$

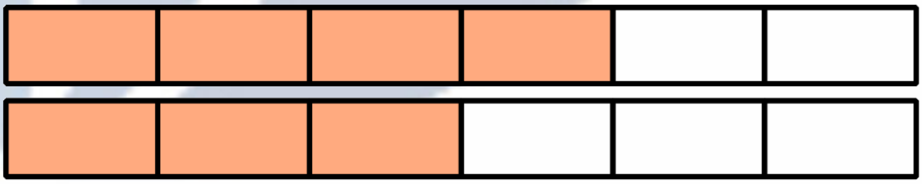
6 Youssef has 5.25 meters of ribbon. He wants to split it into equal pieces of 0.25 meters each. How many pieces will he have?

7 Divide using the forms shown:

ⓐ $3 \div \frac{4}{5} =$ ……



ⓑ $\frac{2}{3} \div \frac{1}{2} =$ ……



8 Hiyam bought 17 boxes of juice; the price of each one is 2.25 pounds. How many pounds did she pay the seller?



First Question: **Choose the right answer:**

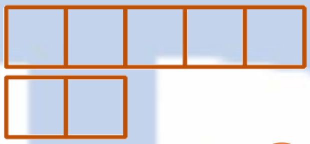
UNIT 9

1 $25:50 = \dots\dots$

ⓐ $10:5$ ⓑ $1:2$
ⓒ $2:1$ ⓓ $5:1$

2 If $\frac{3}{4} = \frac{x}{28}$, then $x = \dots\dots$

ⓐ 7 ⓑ 12
ⓒ 21 ⓓ 24

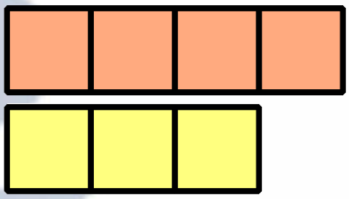
3 The tape diagram  represents the ratio ……

ⓐ $5:2$ ⓑ $3:2$
ⓒ $7:2$ ⓓ $2:3$

4 Which of the following is equivalent to $5:6$?

ⓐ $20:24$ ⓑ 24 to 20
ⓒ $6:5$ ⓓ $24:12$

5 In the opposite figure, the ratio between number of red squares and number of green squares = ……



ⓐ $3:8$ ⓑ $4:3$
ⓒ $3:5$ ⓓ $3:4$

6 The second term in the ratio $\frac{7}{9}$ is ……

ⓐ 7 ⓑ 9
ⓒ 16 ⓓ 2

7 Which of the following is NOT equivalent to $\frac{7}{11}$?

ⓐ $\frac{14}{22}$ ⓑ $\frac{14}{18}$
ⓒ $\frac{21}{33}$ ⓓ $\frac{70}{110}$

8. $2:12$ is equivalent to ……

ⓐ $12:48$ ⓑ $6:18$
ⓒ $4:12$ ⓓ $1:6$

9. The ratio $72:9$ in the simplest form is ……

ⓐ $9:2$ ⓑ $18:81$
ⓒ 8 ⓓ $20:45$

10. If $\frac{5}{9} = \frac{15}{x}$, -, then the value of $x =$ ……

ⓐ 3 ⓑ 5
ⓒ 15 ⓓ 27

11. If $15:x - 1 = 4:8$, then the value of $x =$ ……

ⓐ 15 ⓑ 31
ⓒ 17 ⓓ 16

12. Ahmed needs to study 21 hours to finish his weekly homework, then the rate of his study per day is …… /hr.

ⓐ 2 ⓑ 3
ⓒ 4 ⓓ 12

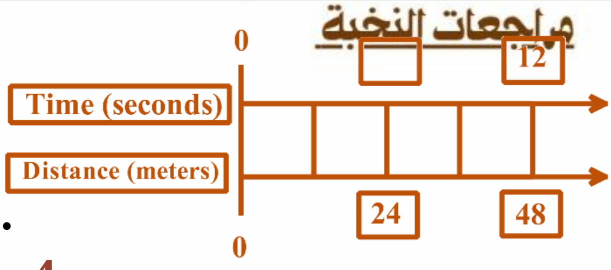
13. If the age of Omar is 15 years, and the age of his father is 45 years old, then the ratio between the age of Omar and his father = …….

ⓐ $1:2$ ⓑ $1:3$
ⓒ $1:4$ ⓓ $1:5$

14. 54 LE. for 9 kg, then the cost of 6 kg is …… L.E

ⓐ 36 ⓑ 9
ⓒ 27 ⓓ 45

15 The missing number in the opposite double number line is ……



ⓐ 2 ⓑ 4
ⓒ 3 ⓓ 6

16 If the ratio between a and b is 1:3 and their sum is 16, then b = …….

ⓐ 12 ⓑ 4
ⓒ 16 ⓓ 9

17 If $\frac{1}{6} = \frac{3}{18}$, then $3 \times 6 = 18 \times$ …….

ⓐ 1 ⓑ 3
ⓒ 6 ⓓ 18

18 If $\frac{20}{25} = \frac{m}{5}$, then the value of $m =$ ……

ⓐ 2 ⓑ 3
ⓒ 4 ⓓ 1

19 If ratio between number of boys and girls is 3:5 then the ratio between girls to total number is ……

ⓐ 3: 5 ⓑ 3: 8
ⓒ 5: 8 ⓓ 5: 2

20 Salma reads 140 pages of stories weekly, then she reads …… pages daily.

ⓐ 20 ⓑ 7
ⓒ 14 ⓓ 70

21 Adam has 36 LE and Lojy has 12 LE, then the ratio of what Lojy has to what Adam has is …… : ……

ⓐ 1: 8 ⓑ 8: 3
ⓒ 1: 3 ⓓ 6: 12

22 $45:35 = \ldots\ldots : \ldots\ldots$

ⓐ $9:7$ ⓑ $4:7$

ⓒ $7:5$ ⓓ $5:4$

23 $\frac{5}{15}$ and $\frac{3}{4}$ are ……

ⓐ equivalent ratio ⓑ not equivalent ratio

24 The ratio between two numbers is 1: 7. If the first number becomes 6, then the second number is ……

ⓐ 42 ⓑ 14

ⓒ 24 ⓓ 16

Second Question: Answer the following:

1 Adham wants to plant trees, He takes 11 minutes to plant 3 trees, complete the following table:

Trees	3	6	12	……
Time	11	……	……	55

2 The ratio between height of Khaled and Seif 3:2 if height of Seif 120 cm. Find the height of Khaled.

----

3 Show which of the following ratios are equivalent and which are not equivalent.

ⓐ $\frac{20}{24}, \frac{18}{27}$ ⓑ $\frac{36}{18}, \frac{48}{24}$

----

4 Find each ratio in simplest form:

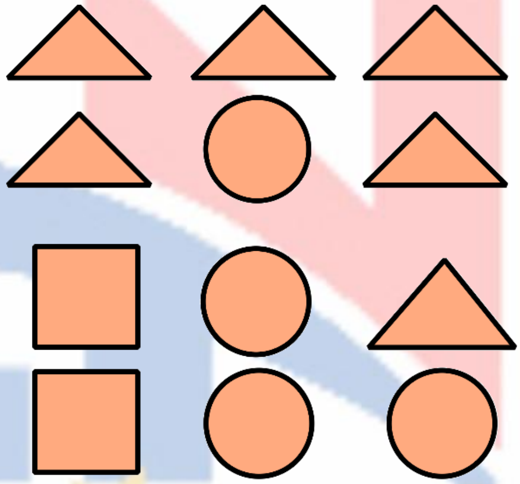
ⓐ $49:56$ ⓑ $24:30$

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5 The total number of students in a school is 420, if the number of boys is 240, find the number of girls, then find the ratio between number of girls and the number of boys in the simplest form?

---

6 In the following figures:



ⓐ The ratio of the number of squares to the number of circles in the simplest form is …… : ……

ⓑ The ratio of the number of squares to the number of triangles in the simplest form is …… : ……

First Question: Choose the right answer:

UNIT 10

1 Ahmed studies 24 pages in 6 hours, then the unit rate of his study is …… pages per hour.

ⓐ 5 ⓑ 4
ⓒ 3.5 ⓓ 5.5

2 $1 - \frac{3}{4} = \ldots\ldots\ \%$

ⓐ 25 ⓑ 2.5
ⓒ $\frac{1}{4}$ ⓓ 0.25

3 The value of 30% of 120 equals ……

ⓐ 50 ⓑ 75
ⓒ 36 ⓓ 100

4 The percentage that represents 650 LE of 1,000 LE is ……

ⓐ 650% ⓑ 65%
ⓒ 350% ⓓ 35%

5 $5.32m = \ldots\ldots\ cm$

ⓐ 0.0532 ⓑ 523
ⓒ 532 ⓓ 5320

6 3 Liters = ……. Milliliters.

ⓐ 3 ⓑ 30
ⓒ 300 ⓓ 3000

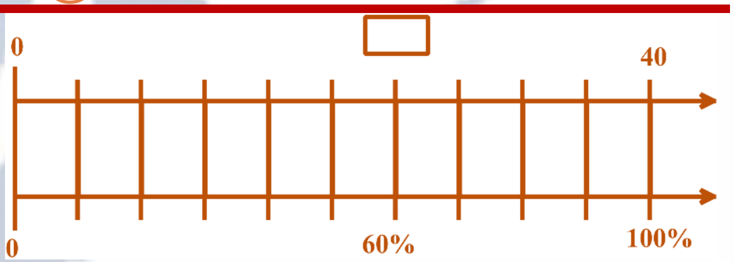
7 1% of 600 L.E = ……. L.E

ⓐ 100 ⓑ 60
ⓒ 6 ⓓ 0.6

8 If a car consumes $\frac{1}{10}$ liter of petrol to cover 1 km, then it covers …… Km per liter.

ⓐ 1 ⓑ 5
ⓒ 10 ⓓ 20

9 From the opposite double number line.
60% of 40 = ……



ⓐ 4 ⓑ 24
ⓒ 240 ⓓ 18

10 If 15 L.E for 3 kg, then the cost of 25 kg is …… L.E

ⓐ 15 ⓑ 150
ⓒ 25 ⓓ 125

11 Which of the following is NOT a conversion factor?

ⓐ $\frac{60min}{1sec}$ ⓑ $\frac{1L}{1000ml}$

ⓒ $\frac{1000m}{1km}$ ⓓ $\frac{1day}{24hr}$

12 $\frac{1}{4}$ = …… %

ⓐ 20 ⓑ 50

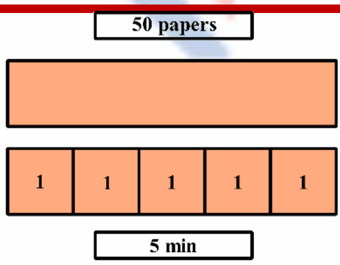
ⓒ 25 ⓓ 75

13 50% …… $\frac{3}{4}$

ⓐ > ⓑ <

ⓒ = ⓓ Otherwise

14 From the opposite tape diagram, the unit rate of the printer is ……



ⓐ 250 ⓑ 50

ⓒ 10 ⓓ 25

15 $1\frac{1}{2}$ = ……. %

ⓐ 5 ⓑ 150

ⓒ $1\frac{1}{2}$ ⓓ 1500

16 20 cups of flour to make 5 pizza, then …… pizza per cup of flour.

ⓐ 100 ⓑ 4

ⓒ $\frac{1}{5}$ ⓓ $\frac{1}{4}$

17 The percentage that represents 340 L.E. of 1.000 L.E. is ……

ⓐ 340% ⓑ 34%

ⓒ 3.4% ⓓ 3.5%

18 $1 - [30\% + 20\%] = \dots\dots$

ⓐ 0.45 ⓑ 5%

ⓒ $\frac{1}{2}$ ⓓ 50

---

19 …… gm = 20 kg

ⓐ 0.02 ⓑ 2000

ⓒ 200 ⓓ 20000

---

20 $20\% \dots\dots \frac{2}{5}$

ⓐ $>$ ⓑ $<$

ⓒ $=$ ⓓ Otherwise

---

21 The value of 10% of 4,200 L.E is ……

ⓐ 420 ⓑ 42

ⓒ 12 ⓓ 210

---

22 90% of …… $= 360$

ⓐ 0.4 ⓑ 4

ⓒ 40 ⓓ 400

---

23 $255\% = \dots\dots$

ⓐ $1\frac{25}{100}$ ⓑ $2\frac{25}{200}$

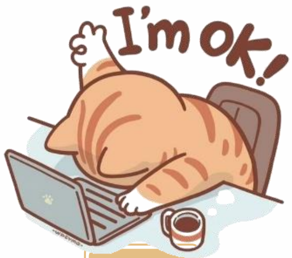
ⓒ $2\frac{1}{4}$ ⓓ 0.225

---

24 Noah spends 48 pounds in 6 days, then he will spend …… L.E in 10 days.

ⓐ 240 ⓑ 60

ⓒ 80 ⓓ 40



Second Question: Answer the following:

1 A factory (A) produces 600 lamps in 40 hours, another factory (B) produces 700 lamps from the same kind in 50 hours, which factory has a better rate of production?

----

2 If the price of 4 kilograms of cheese is 800 L.E. Find the price of 3 kilograms of the same cheese

----

3 Which is best buy?

15 kg per 30 L.E OR 12. 5 L.E per 5 K.g



----

4 A man bought a T.V set. He was given a 10% discount of its marked price, was 10,000 L.E. Find its price after discount.

----

5 A speed of a car is 180 kilometers per hour. convert its speed to meters per minute.

----

6 An iPad that costs 20,800 LE with discount of 20% off. Find:

ⓐ The money saved.

ⓑ The sale price of the iPad.

First Question: Choose the right answer:

UNIT 11

1 The point $(-2, 3)$) lies in the …… quadrant

ⓐ first ⓑ second
ⓒ third ⓓ fourth

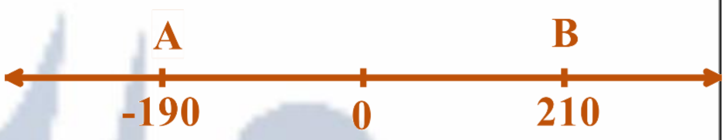
2 The point $(-4, 9)$ located at distance …… units from x-axis.

ⓐ 4 ⓑ 9
ⓒ 13 ⓓ 5

3 If the point at the position $(-1, 3)$ has moved 2 units to the right and 4 units downwards then its new position is ……

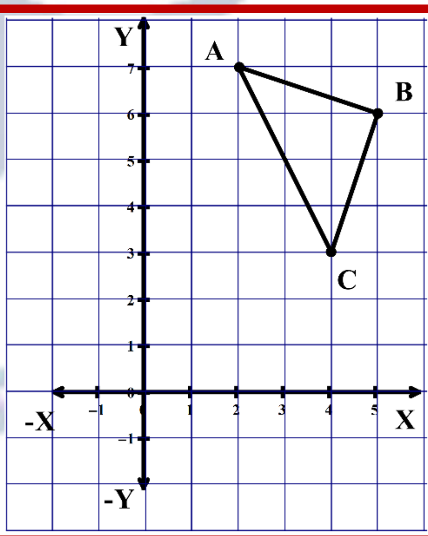
ⓐ $(-3, 7)$ ⓑ $(0, 7)$
ⓒ $(1, -1)$ ⓓ $(3, 1)$

4 In the opposite figure:
The distance between the two points A and B = ……



ⓐ 20 ⓑ 210
ⓒ 400 ⓓ 400

5 In the opposite figure:
Which set of ordered pairs shows the coordinates of the points A, Band C?



ⓐ $(7, 2), (6, 5), (3, 4)$
ⓑ $(7, 2), (5, 6), (3, 3)$
ⓒ $(2, 7), (5, 6), (4, 3)$
ⓓ $(2, 7), (6, 5), (4, 3)$

6 Laila plotted a point on a coordinate plane to represent the ordered pair (7.4). Which statement is true about the x-coordinate in the ordered pair?

ⓐ The x-coordinate is 7 units up from the x-axis.
ⓑ The x-coordinate is 7 units to the right of the y-axis.
ⓒ The x-coordinate is 4 units below the x-axis
ⓓ The x-coordinate is 4 units to the right of the y-axis

7 The points $(1,-1), (2-2), (4,-5), (-3,-4)$ ……



ⓐ lie in the second quadrant.
ⓑ lie in the third quadrant
ⓒ lie in the fourth quadrant
ⓓ do not lie in the same quadrant

8 Point $C(5,-3)$ lies in the …… quadrant.

ⓐ first ⓑ second
ⓒ third ⓓ fourth

9 The distance between the two points $(-5,6)$ and $(-5,2)$ is length units ……

ⓐ -5 ⓑ 4
ⓒ 8 ⓓ 0

10 The distance between -6 and 5 on the number line is …… units.

ⓐ 1 ⓑ -1
ⓒ 11 ⓓ 5

11 The two points $(3,-7)$ and $(-6,-7)$ lie on the same ……

ⓐ horizontal line ⓑ vertical line
ⓒ inclined line ⓓ otherwise

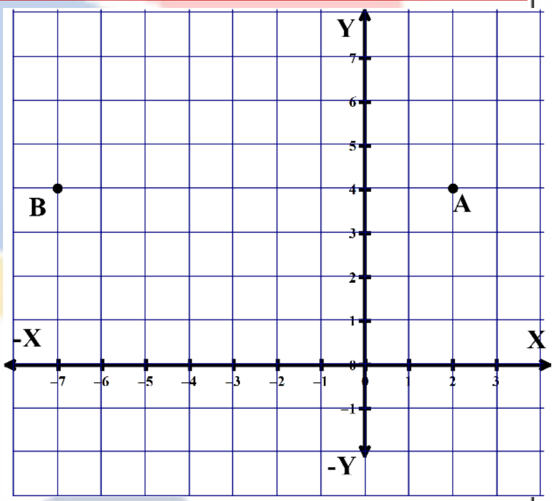
12 Plot the points $O(0.0), A\ (3.0), B(3,4), C(0,4)$ and draw overline $\overline{OA}$, $\overline{AB}$, $\overline{BC}$ and $\overline{CO}$ which figure is obtained?

ⓐ Square ⓑ Rectangle
ⓒ Trapezium ⓓ Rhombus

13 Which point is a reflection of (12, - 8) across the y-axis on a coordinate plane?

ⓐ $(-12, -8)$ ⓑ $(8, 12)$
ⓒ $(-8, 12)$ ⓓ $(12, 8)$

14 the opposite coordinate plane, the length of $AB = \dots\dots$ units.

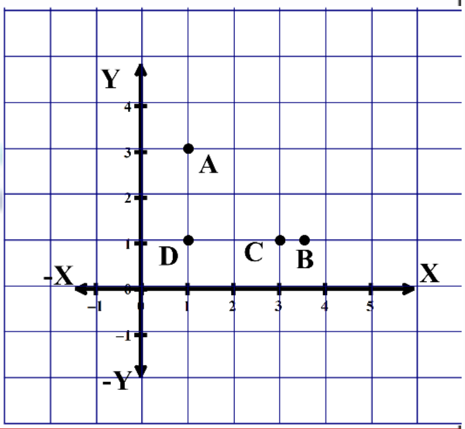


ⓐ 7
ⓑ 9
ⓒ 14
ⓓ -9

15 Which is true of all points in the second quadrant?

ⓐ positive x-coordinate, positive y-coordinate
ⓑ negative x-coordinate, negative y-coordinate
ⓒ negative x-coordinate, positive y-coordinate
ⓓ positive x-coordinate, negative y-coordinate

16 Use the opposite graph to answer the question. Which point is located at $(3\frac{1}{2}, 1)$?



ⓐ Point A
ⓑ Point B
ⓒ Point C
ⓓ Point D

17 Which of the following points lies in the 2^{nd} quadrant?

ⓐ $(-4, 3)$ ⓑ $(0, -7)$

ⓒ $(1, 9)$ ⓓ $(7, 0)$

18 If the point $(x, -3)$ lies in the 3^{rd} quadrant, then the value of x is ……

ⓐ 2 ⓑ 7

ⓒ -3 ⓓ 5

19 The image of the point $(2, -9)$ by reflection on the x-axis is ……

ⓐ $(2, 9)$ ⓑ $(-9, 2)$

ⓒ $(-2, -9)$ ⓓ $(-2, 9)$

20 Which point of the following can be a vertex of a right-angled triangle if the other vertices are $(0, 8)$ and $(4, 0)$?

ⓐ $(0, 1)$ ⓑ $(0, -1)$

ⓒ $(0, 0)$ ⓓ $(1, 1)$

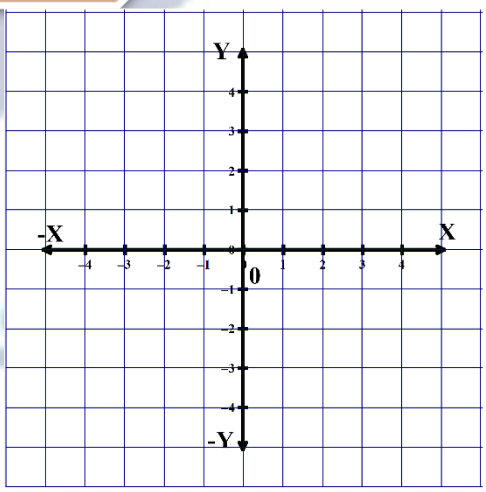
21 The point …… lies on the x-axis.

ⓐ $(6, -7)$ ⓑ $(0, -2)$

ⓒ $(-3, 0)$ ⓓ $(4, 2)$

Second Question: Answer the following:

1 Using graph paper:
Plot the points $(-3, 3)$, $(3, -1)$, and $(-3, -1)$, and connect them.
Does the resulting figure form a right triangle? If yes, what are the coordinates of the vertex of the right angle?



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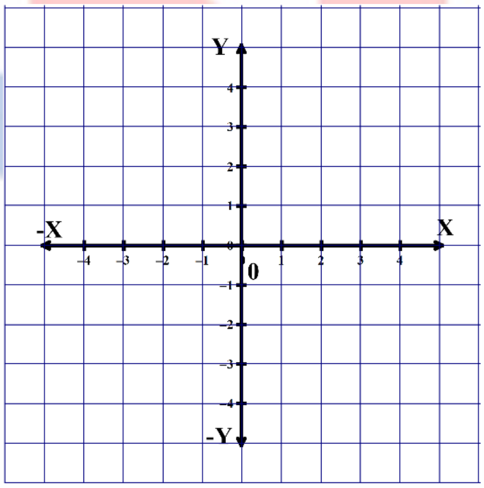
2 You are at $(-1, 0)$ Move 2 units left and 5 units up. Where do you land?

----

3 Find the distance between $C(3, -4)$ and $D(3, -2)$

----

4 Plot the points $A(-2, -2), B(3, -2), C(3, 2)$ and $D(-2, 2)$ on the coordinate plane what is the name of the figure ABCD?



----

5 Graph the points $A(-2, -3)$ and $B(2, -3)$

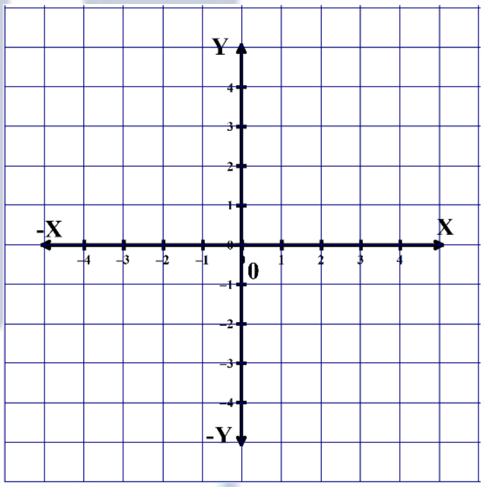
What are the coordinates of Cand D

IF ABCD is a square?

(Two answers are possible)

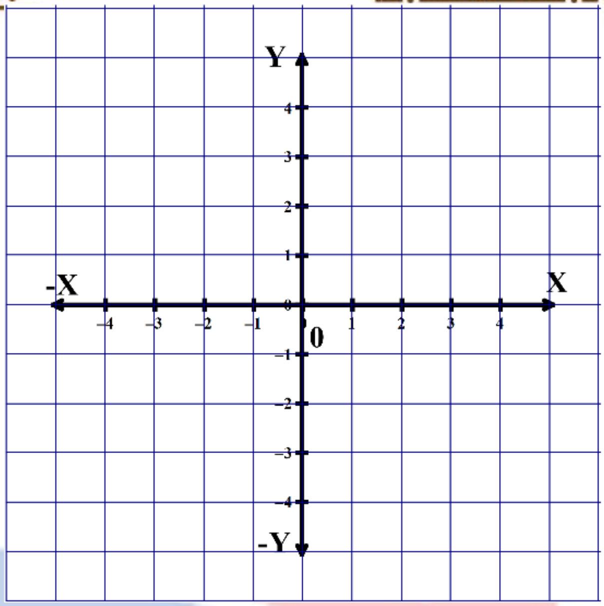
C (…… , ……)

D (…… , ……)





6 Using graph paper:
Plot the point $(0, -2)$ as a vertex of a square with a side length of 4 units. Determine the coordinates of the other three vertices to complete the square.



First Question: Choose the right answer:

UNIT 12

1 A …… is a parallelogram with equal sides and four right angles.

ⓐ square ⓑ rectangle
ⓒ rhombus ⓓ trapezium

2 If the base length of a parallelogram is 8 cm and its corresponding height is 4 cm, then its area is …… cm^2

ⓐ 2 ⓑ 12
ⓒ 32 ⓓ 16

3 If the area of a triangle is 12 cm^2 and its base is 4 cm, then its height is …… cm.

ⓐ 5 ⓑ 6
ⓒ 10 ⓓ 48

4 The number of heights of any triangle is ……

ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

5 Area of a parallelogram = ……

ⓐ $\frac{1}{2} \times b \times h$ ⓑ $b \times h$

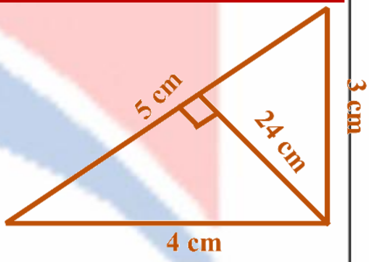
ⓒ $2 \times b \times h$ ⓓ $\frac{b \times h}{4}$

6 If the side length of a rhombus is 10 cm and it's height 3.4 cm, then it's area …… cm^2

ⓐ 34 ⓑ 43

ⓒ 340 ⓓ 3400

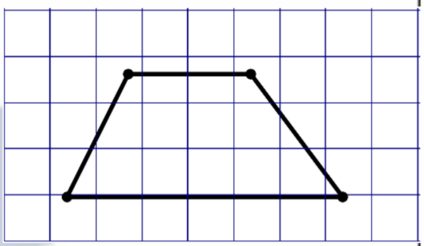
7 Which expression represents the area of the drawn triangle?



ⓐ $\frac{1}{2} \times 3 \times 5$ ⓑ $\frac{1}{2} \times 24 \times 4$

ⓒ $\frac{1}{2} \times 3 \times 4$ ⓓ $\frac{1}{2} \times 4 \times 5$

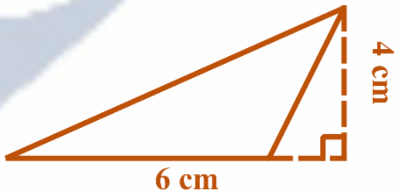
8 The area of the drawn trapezium = ……. square units.



ⓐ 27 ⓑ 13.5

ⓒ 18 ⓓ 54

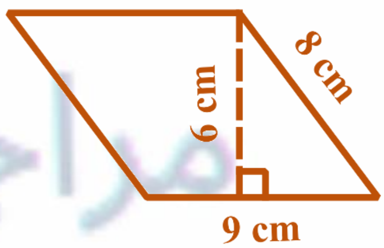
9 The area of the drawn triangle = …… cm^2



ⓐ 10 ⓑ 12

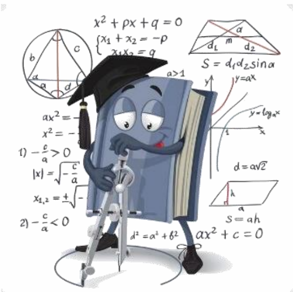
ⓒ 24 ⓓ 48

10 The area of the opposite parallelogram = …… cm^2.



ⓐ 72 ⓑ 54

ⓒ 34 ⓓ 48



11 If area of a parallelogram is $50cm^2$ and the length of the base is 5 cm, then its height is ……. m.

ⓐ 10 ⓑ 16
ⓒ 250 ⓓ 18

12 The number of heights of the right triangle is ……

ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

13 If a parallelogram has dimensions $AB = 9$ cm and $BC = 13$ cm, then the length of the corresponding height to AB ……. the length of the corresponding height to BC.

ⓐ $>$ ⓑ $<$
ⓒ $=$ ⓓ Otherwise

14 A parallelogram in which all sides are equal in length is called a ……

ⓐ square ⓑ rectangle
ⓒ rhombus ⓓ trapezium

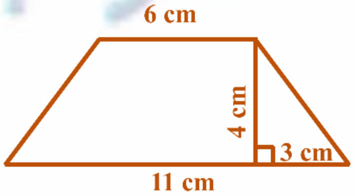
15 If the area of a triangle is 15 cm^2 and its base is 6 cm, then its height is …… cm.

ⓐ 5.5 ⓑ 5
ⓒ 6 ⓓ 90

16 Area of a triangle = ……

ⓐ $\frac{1}{2}bb$ ⓑ $\frac{b}{2} \times h$
ⓒ $\frac{1}{2}hh$ ⓓ $b \times h$

16 The area of the opposite trapezium = ……



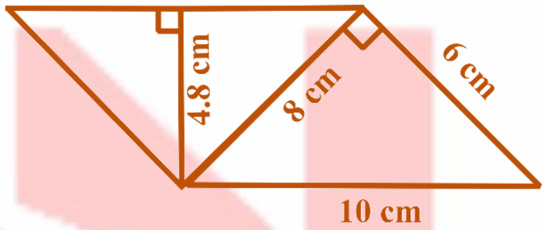
ⓐ 30 ⓑ 34
ⓒ 40 ⓓ 55

17 A rhombus of side length 14 cm and the ratio between its height and its side length is 5:7. then the area of the rhomb is …… cm^2

ⓐ 35 ⓑ 70

ⓒ 100 ⓓ 140

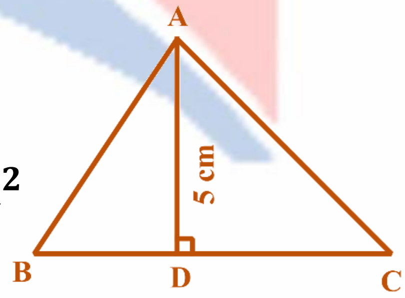
18 Which of the following expressions does represent the area of the opposite parallelogram?



ⓐ $\frac{1}{2} \times 6 \times 8$ ⓑ 6×10

ⓒ 4.8×8 ⓓ 10×4.85

19 In the opposite figure:
ABC is a triangle in which
$\overline{AD} \perp \overline{BC}$, $AD = 5cm$. area of $\Delta ABC = 15\ cm^2$
, then $BC =$ ……

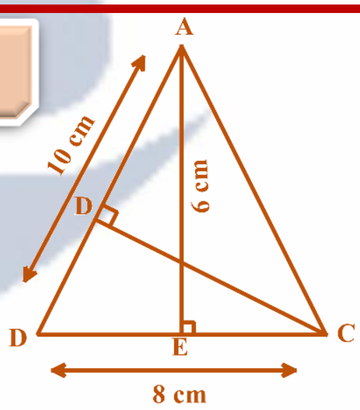


ⓐ 3 ⓑ 6

ⓒ 9 ⓓ 12

Second Question: Answer the following:

1 According to the opposite triangle, find the length of CD.



----

2 A triangle is of base length 5 cm and its corresponding height is 2cm more than, find the area of the triangle.

----

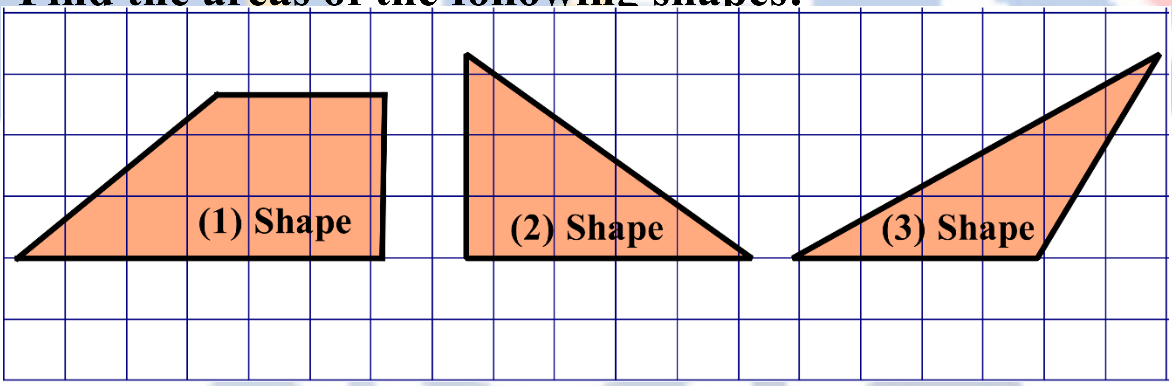
3 Find the area of the rhombus whose perimeter is 20 cm and its height 3.4cm

---

4 Which is greater in area?
A parallelogram whose base length is 12 cm and its corresponding height in 10 cm or a rectangle whose dimensions are 14 cm and 8 cm.

---

5 Find the areas of the following shapes:



The area of shape (1) ……. square units.

The area of shape (2) ……. square units.

The area of shape (3) ……. square units.

First Question: Choose the right answer:

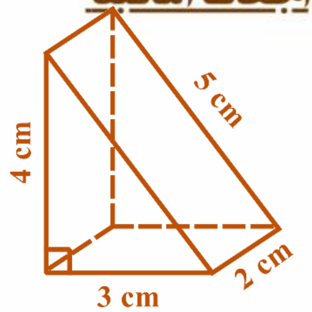
UNIT 13

1 The surface area of the cube whose side length is (s) = ……

ⓐ S × S × S ⓑ S^2

ⓒ 6 × S × S ⓓ S + S + S

2 The surface area of the opposite triangular prism is …… cm^2

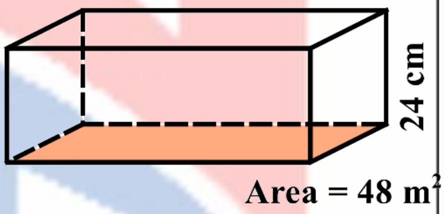


ⓐ 24 ⓑ 36
ⓒ 48 ⓓ 56

3 The volume of the cuboid = ……

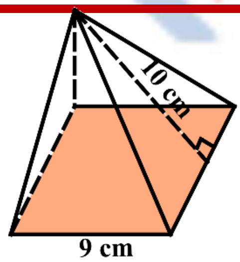
ⓐ $l + w + h$ ⓑ $l \times w \times h$
ⓒ $l \times w + h$ ⓓ $l + w \times h$

4 The volume of the opposite cuboid = …… cm^2.



ⓐ 120 ⓑ 84.2
ⓒ 224.2 ⓓ 115.2

5 The surface area of the opposite square pyramid is …… cm^2

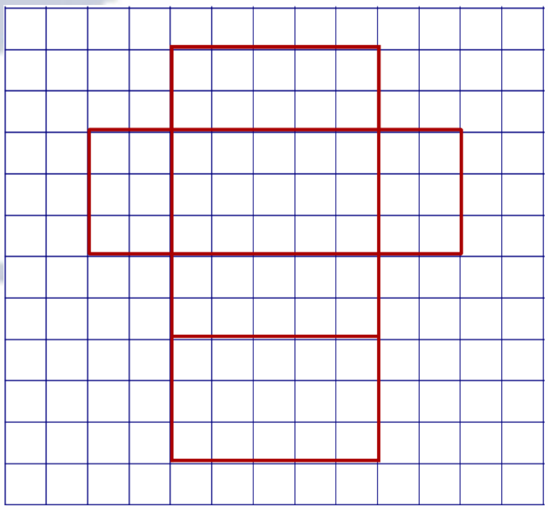


ⓐ 148 ⓑ 156
ⓒ 240 ⓓ 261

6 If the three dimensions of a cuboid are doubled, then the ratio between the new volume to the original volume of the cuboid is ……

ⓐ 8:1 ⓑ 1:8
ⓒ 4:1 ⓓ 1:4

7 The surface area of the cuboid is …… square units.



ⓐ 60
ⓑ 62
ⓒ 70
ⓓ 72

8 A cuboid whose base area is 45 cm^2, and its height is 5 cm, then its volume = …… cm^3

ⓐ 9 ⓑ 225
ⓒ 18 ⓓ 125

9 A cube with surface area of 60 cm². Then the area of one face is …… cm^2

ⓐ 10 ⓑ 6
ⓒ 27 ⓓ 25

10 The ratio between the area of one face and its surface area is ……

ⓐ 1:4 ⓑ 1:6
ⓒ 4:1 ⓓ 6:1

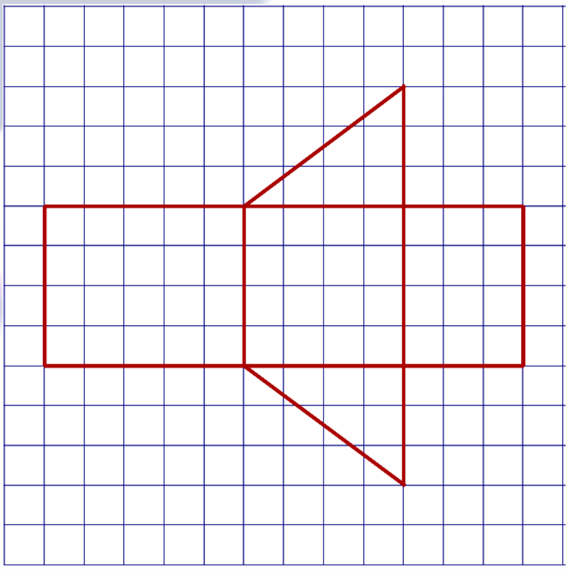
11 A cuboid has dimensions of 0.5 cm, 7 cm, and 2 cm, then its surface area = …… cm^2

ⓐ 35 ⓑ 14
ⓒ 59 ⓓ 37

12 The volume of a cuboid whose dimensions are 10 cm, 6 cm, and 3 cm is …… cm^3.

ⓐ 90 ⓑ 180
ⓒ 160 ⓓ 19

13 The surface area of the opposite triangular prism = …… square units.



ⓐ 60
ⓑ 68
ⓒ 72
ⓓ 80

14 The perimeter of one face of a cube is 28 cm, then the surface area of the cube is …… cm^2.

ⓐ 168 ⓑ 224
ⓒ 294 ⓓ 314

15 The surface area of the cuboid whose length is 12 cm, its width is 8 cm and its height is …… cm^3.

ⓐ 480 ⓑ 552
ⓒ 630 ⓓ 740

16 The volume of the cuboid whose base area is $24\frac{1}{2}$ cm^2 and its height is 18 cm equals …… cm^3.

ⓐ $882\frac{1}{2}$ ⓑ 294
ⓒ $220\frac{1}{4}$ ⓓ 441

17 The volume of a cuboid of dimensions 12 cm, 9.5 cm and $4\frac{1}{4}$ cm is …… cm^3.

ⓐ 484.5 ⓑ 540
ⓒ 432 ⓓ 480

18 A cuboid of volume 35 cm^3 of its dimensions is doubled, then the new volume of the cuboid …… cm^3.

ⓐ $17\frac{1}{2}$ ⓑ 70
ⓒ 105 ⓓ 140

19 The surface area of a cuboid with dimensions of 3 cm, 5 cm, and 7 cm is …… cm^2.

ⓐ 2×15 ⓑ $3 \times 5 \times 7$
ⓒ $2 \times (15 + 35 + 21)$ ⓓ $4 \div 10 + 20$

20 The formula for the area of a cube is ……

ⓐ $6\,s^2$　　ⓑ $4\,s^2$

ⓒ $6\,s$　　ⓓ s^2

21 A cubic meter is a unit of ……

ⓐ capacity　　ⓑ weight

ⓒ volume　　ⓓ time

22 If the base area of a cuboid is 80 cm². and its height is 9 cm. then its volume is …… cm^3.

ⓐ 720　　ⓑ 72

ⓒ 360　　ⓓ 810

23 The ratio between the surface area of a cube and the area of one face is ……

ⓐ 1: 4　　ⓑ 1: 6

ⓒ 4: 1　　ⓓ 6: 1

Second Question: Answer the following:

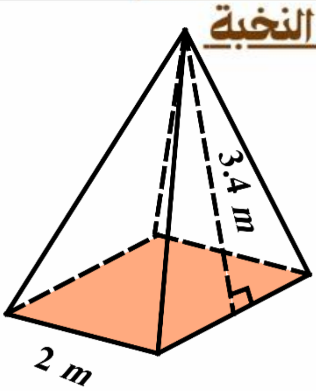
1 If the volume of a cuboid is 720 cm³ and its height is 10 cm. Find its base area?

----

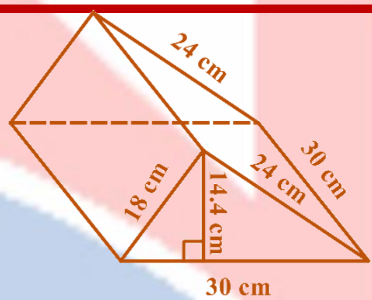
2 Doaa bought a box of chocolate for her mother, she wants to wrap the box with colored paper, find the area of the paper knowing that the dimensions of the box are 10 cm, 6 cm and 8 cm.



3 Find the surface area of the opposite squared - based pyramid.

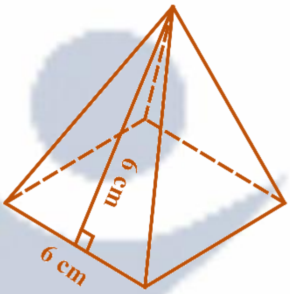


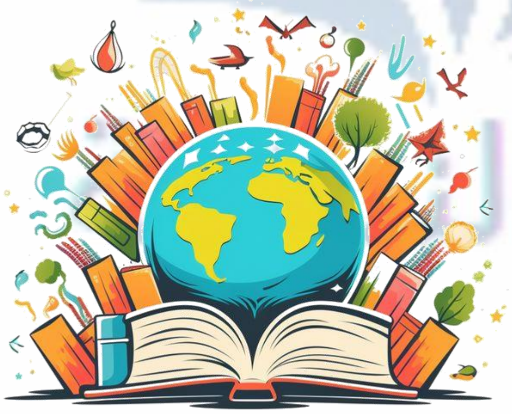
4 Calculate the surface area of the opposite triangular prism.



5 A cuboid with dimensions 14.3 cm, 10.2 cm and 8 cm Find the volume of the cuboid.

6 Answer the following:
What is the Surface area?





اَلْفِكْرَةُ بِاخْتِصَار:
ضَعْ هَدَفاً وَلَا تَتَخَلَّى عَنْهُ
حَتَّى تُحَقِّقَهُ
ابدأ الآن مع أسماء صقر

FINAL REVISION

First Question: Choose the right answer:

1 The reciprocal of 5 is …….

ⓐ 1 ⓑ $\frac{1}{5}$

ⓒ 15 ⓓ 5

2 If the water tap is leaking 420 liters of water in one hour, then the rate of leaking = …… L/min.

ⓐ 420 ⓑ 7

ⓒ 70 ⓓ 42

3 The number of heights of any triangle is …….

ⓐ 3 ⓑ 2

ⓒ 1 ⓓ 0

4 The ratio between the perimeter of an equilateral triangle and its side length = ……

ⓐ $1:4$ ⓑ $4:1$

ⓒ $1:3$ ⓓ $3:1$

5 10 % of …… = 27

ⓐ 540 ⓑ 270

ⓒ 10 ⓓ 2.7

6 The distance between the point $(0, -4)$ and the origin point is …… units.

ⓐ 0 ⓑ -4

ⓒ 4 ⓓ 8

7 Which point of the following lies in the 4th quadrant ……

ⓐ $(-2, 3)$ ⓑ $(-4, -3)$
ⓒ $(5, -1)$ ⓓ $(1, 1)$

8 A parallelogram which all sides are equal in length is called a ……

ⓐ square ⓑ rectangle
ⓒ rhombus ⓓ trapezium

9 The ratio between two numbers is 2: 5. If the first number became 8, then the second number will be ……

ⓐ 8 ⓑ 10
ⓒ 15 ⓓ 20

10 $\frac{2}{3} \div \frac{1}{5} =$ ……



ⓐ $\frac{2}{3} \times 5$ ⓑ $\frac{3}{2} \times 5$
ⓒ $\frac{3}{4} \times \frac{1}{5}$ ⓓ $\frac{7}{3} \times \frac{1}{5}$

11 A cube with a surface area of 96 cm^2, then the edge length is …… cm.

ⓐ 4 ⓑ 3
ⓒ 27 ⓓ 16

12 …… $\div 2.15 = 1200 \div 215$

ⓐ 120 ⓑ 12
ⓒ 1.2 ⓓ 1200

13 If the volume of a cuboid is 280 cm^3, and its base area is 70 cm^2, then its height is …… cm.

ⓐ 40 ⓑ 7
ⓒ 4 ⓓ 40

14 Hany spends L.E. 120 in 4 days. What's the rate of what he spends per day?

ⓐ 50 L.E per day ⓑ 30 L.E per day
ⓒ 15 L.E per day ⓓ 60 L.E per day

15 2.3 pounds = …… plasters.

ⓐ 2300 ⓑ 230
ⓒ 23 ⓓ 2.3

16 If $x : 15 = 1 : 3$, then $x + 3 =$ ……

ⓐ 5 ⓑ 8
ⓒ 9 ⓓ 11

17 If a car covers 240 km in 3 hours, then its speed is …… km/hr.

ⓐ 70 ⓑ 80
ⓒ 100 ⓓ 90

18 $\frac{3}{8} \times$ …… $= 1$

ⓐ $\frac{3}{8}$ ⓑ 1
ⓒ $\frac{8}{5}$ ⓓ $2\frac{2}{3}$



19 The distance between -6 and 5 on the number line is …… unit(s).

ⓐ 1 ⓑ -1
ⓒ 11 ⓓ 5

20 The area of a triangle = ……

ⓐ $\frac{1}{2} \times b \times h$ ⓑ $b \times h$
ⓒ $W \times L$ ⓓ $\frac{1}{4} b \times h$

21 The number of heights of a right triangle is ……

ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

22 35 % of 160 = ……

ⓐ 56 ⓑ 5.6
ⓒ 0.56 ⓓ 560

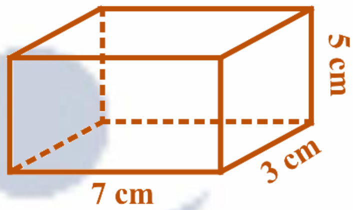
23 A carpenter needs 40 m^2 to make 10 tables, then the rate of used wood = …… m^2/table.

ⓐ 2 ⓑ 3
ⓒ 4 ⓓ 300

24 Any number multiplied by its reciprocal equals ……

ⓐ 0 ⓑ 1
ⓒ the same number ⓓ twice the number

25 The surface area of the following cuboid is …… cm^2



ⓐ 105 ⓑ 70
ⓒ 142 ⓓ 35

26 The number of heights of a right-angled triangle is ……

ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

27 The formula for the area of one face of a cube is ……

ⓐ $6S^2$ ⓑ $4S^2$
ⓒ $6S$ ⓓ S^2

28 Point C (-5, -3) lies on the …… quadrant.

ⓐ first ⓑ third
ⓒ second ⓓ fourth

29 The area of a parallelogram is 54 cm^2, and its base length is 9 cm, then its corresponding height = …… cm.

ⓐ 54 ⓑ 6
ⓒ 9 ⓓ 18

30 The two points (3, -7) and (3, -3) lie on the same ……

ⓐ horizontal line ⓑ vertical line
ⓒ inclined line ⓓ otherwise

31 A cubic meter is a unit of ……

ⓐ capacity ⓑ volume
ⓒ mass ⓓ length

32 The image of the point (0, 5) by reflection on Y-axis is ……

ⓐ $(5, 0)$ ⓑ $(0, -5)$
ⓒ $(5, -5)$ ⓓ itself

33 If $3:5 = 12:4x$, then $x =$ ……

ⓐ 20 ⓑ 24
ⓒ 5 ⓓ 10

34 If $25 \times 33 = 825$, then $0.25 \times 3.3 =$ ……

ⓐ 82.5 ⓑ 8.25
ⓒ 0.852 ⓓ 0.825

35 $1 - \frac{3}{4} =$ …… %

ⓐ 25 ⓑ 2.5
ⓒ $\frac{1}{4}$ ⓓ 0.25

36 A factory produces 5,400 cans of soda in 9 hours, then the rate of production = …… cans/hour.

ⓐ 6 ⓑ 60
ⓒ 600 ⓓ 6000

37 $45 \div 0.9 = \ldots\ldots \div 9$

ⓐ 0.45 ⓑ 450
ⓒ 45 ⓓ 4.5

38 If the y-coordinate of a point is zero, then the point lies ……

ⓐ in 1st quadrant ⓑ in 3rd quadrant
ⓒ on x-axis ⓓ on y-axis

39 The volume of a cuboid whose dimensions are 6 cm, 4 cm and 1 cm equals …… cm^3.

ⓐ 10 ⓑ 12
ⓒ 48 ⓓ 24

40 The two points (3, -7) and (-6, -7) lie on the same ……

ⓐ horizontal line ⓑ vertical line
ⓒ inclined line ⓓ otherwise

41 The reciprocal of the number ……. is $4\frac{2}{5}$

ⓐ $\frac{22}{5}$ ⓑ $4\frac{5}{2}$
ⓒ $\frac{5}{22}$ ⓓ $\frac{2}{11}$

42 A parallelogram which has a right angle is called a ……

ⓐ square ⓑ rectangle
ⓒ rhombus ⓓ trapezium

43 The ratio between the perimeter of a square and its side length = ……

ⓐ 1: 3 ⓑ 3: 1

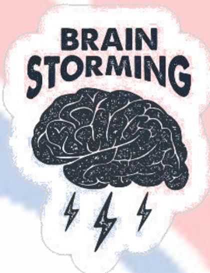
ⓒ 1: 4 ⓓ 4: 1

44 $5 \times \ldots\ldots = 1$

ⓐ $\frac{25}{5}$ ⓑ 1

ⓒ $\frac{1}{5}$ ⓓ 0

45 $\ldots\ldots = \frac{4}{7} \times \frac{5}{4}$



ⓐ $\frac{7}{4} \div \frac{5}{4}$ ⓑ $\frac{4}{7} \div \frac{4}{5}$

ⓒ $\frac{7}{4} - \frac{5}{4}$ ⓓ $\frac{1}{7} \times \frac{1}{5}$

46 $5.2 \times 0.3 = \ldots\ldots$

ⓐ 0.156 ⓑ 1.56

ⓒ 15.6 ⓓ 156

47 Malak studies 48 pages in 6 hours, then the unit rate of his study is …… pages/hour.

ⓐ 5 ⓑ 4

ⓒ 8 ⓓ 5.5

48 60 % of …… = 360

ⓐ 0.6 ⓑ 6

ⓒ 60 ⓓ 600

49 2.3 tons …… 2300 kg

ⓐ > ⓑ <

ⓒ = ⓓ Otherwise

50 Which of the following lies in the 2nd quadrant?

ⓐ $(1, -1)$ ⓑ $(0, -1)$

ⓒ $(-1, 1)$ ⓓ $(1, -1)$

51 A parallelogram with area 48 cm³ and base length 6 cm, then it's corresponding height is …… cm.

ⓐ 9 ⓑ 8

ⓒ 7 ⓓ 8.5

52 A triangle with base length of 10 cm, and its corresponding height is 6 cm, then its area = …… cm^2.

ⓐ 30 ⓑ 15

ⓒ 45 ⓓ 60

53 The ratio between two numbers is 1:4. If the first number became 5, then the second number will be ……

ⓐ 42 ⓑ 14

ⓒ 20 ⓓ 16

54 If the percentage of success in a school is 76%, so the percentage of failures is …… %.

ⓐ 24 ⓑ 44

ⓒ 67 ⓓ 90

55 Which point of the following can be a vertex of a right-angled triangle if the other vertices are $(0, 8)$ and $(4, 0)$?

ⓐ $(0, 1)$ ⓑ $(0, -1)$

ⓒ $(0, 0)$ ⓓ $(1, 1)$

56 The image of the point (2,-9) by reflection across Y-axis is ……

ⓐ $(2, 9)$ ⓑ $(-9, 2)$

ⓒ $(-2, -9)$ ⓓ $(-2, 9)$

57 The distance between the points (-5,6) and (- 5, 2) = …… length units.

ⓐ -5 ⓑ 4
ⓒ 8 ⓓ 0

58 $\frac{7}{3} = \frac{15}{x} = \ldots\ldots$

ⓐ 3 ⓑ 21
ⓒ 15 ⓓ 35

59 In a restaurant, there's 10% added to each meal as a service. If the price of a meal is 240 L.E., then the price of the meal after adding the service is L.E ……

ⓐ 248 ⓑ 264
ⓒ 24 ⓓ 258

60 30 L.E for 5 kg, then the cost of 30 kg is …… L.E

ⓐ 5 ⓑ 30
ⓒ 90 ⓓ 180

Second Question: Answer the following:

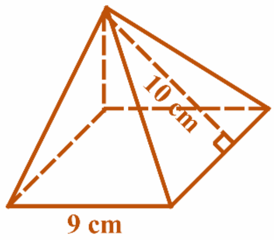
1 A rectangular prism has dimensions of 7 cm, 5 cm, and 3 cm. Find its surface area.

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2 A car consumed 640 liters of gasoline in 4 months. How many liters did the car consume on average in one month?

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3 Find the surface area of the opposite square-based pyramid.



4 If you are at (-1, 0), move 5 units left and 3 units downward. Where do you land?

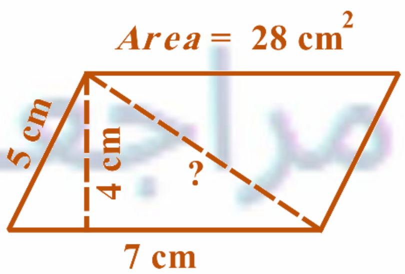
5 We ate 5 out of 10 bananas. What percentage of the bananas did we eat? Determine the part, whole, and percentage of this question?

Total	Part	Percentage
……	……	……

6 Find the area of the opposite trapezium.

7 Find the values of y if y < 0 , and the distance between (-2, y) and (-2, 5) is 7 units.

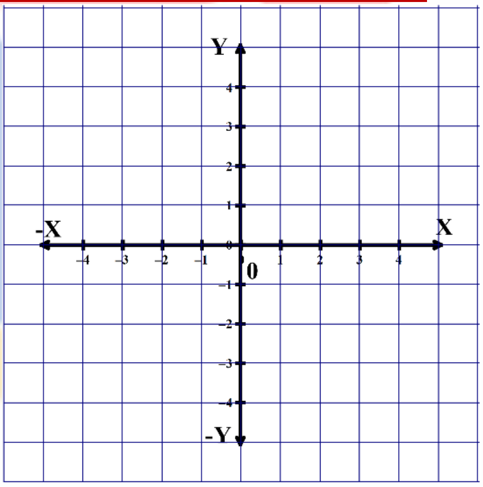
8 Find the length of the missing side:



9 If the ratio between two numbers is 7:4 and the smaller number is 12 Find the greater number.

10 A merchant sold 30 kilograms of bananas at a price of 17.5 pounds per kilogram.

11 By using paper graph:
Plot the points (-3, 3), (3, -1), and (-3,-1) and connect them.
Does this figure form a right triangle? If yes, what are the coordinates of the vertex of the right angle?



12 A man bought a T.V. set he was given a 15% discount of its marked price which was 10,000 LE.
Find its price after discount.

13 Find the value of: 30% of 850

14 A pyramid of metal. The square base has a side length of about 100 cm. The height of each triangular face is about 80 cm. What is the surface area of the pyramid?

15 If 437.5 LE. is distributed among the excellent pupils and each of them takes 17.5 L.E.
Find the number of excellent pupils.

---

16 An animal runs at a speed of 42 km/hr. Find its speed in meters per minute.

---

17 A car travels a distance of 120 kilometers in two hours, express this using the word average?

---

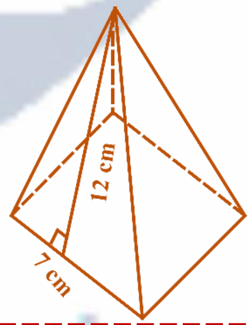
18 Find:

ⓐ $\frac{3}{7} \div 2\frac{1}{3} = \ldots\ldots.$

ⓑ $2.4 \times 0.02 = \ldots\ldots$

---

19 Find the surface area of the following square pyramid:



---

20 Assuming you stored 20 boxes of goods, which is 80% of the boxes, what is the total number of boxes?

21 If the ratio between the number of boys and girls in a class is 4: 5 and the number of boys is 20 boys.
Find the total number of pupils in the class

---

22 How much is $\frac{1}{4}$ the number 20?

---

23 In a mathematics exam Yousef got 38 marks of 40 marks.
Find the percentage of the marks he got.

---

24 If Murad has 40 L.E. and Ahmed Nassr has 32 L.E.
Find. The ratio between what Murad has and the total sum of money in simplest form.

---

25 A box of table tennis balls weighs $\frac{5}{9}$ of a kilogram. If each ball weighs $\frac{15}{81}$ of a kilogram. How many balls are there in the box?

---

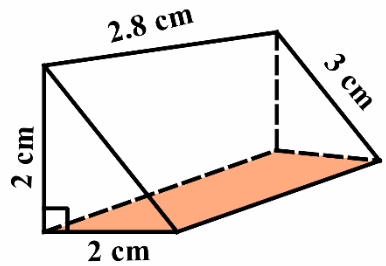
26 A merchant sold 30 kilograms of bananas at a price of 17.5 pounds per kilogram. Calculate the price of the quantity of bananas.

---

27 Mona bought 5 kg of apples. She paid 45 L.E.
How much money will she pay to buy 10 kg?

---

28 Calculate the surface area of the opposite prism.



---

29 If the area of a rhombus is 48 m, and its height is 6 m Find its side length.

ولادنا مش أغبياء... إحنا بس محتاجين نفهمهم صح.
قناة النخبة التعليمية بتقدّم منهج ابتدائي لكل المواد
بطريقة تناسب عقول الأطفال، مش تعب الكبار.
فيديوهات مختصرة، واضحة، ومليانة أمثلة تخلي المعلومة
تعيش في دماغه.

مراجعات النخبة

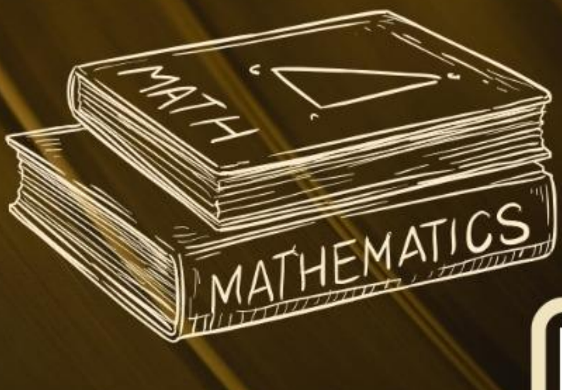
Math Final Review 2025

Answer form

6th Primary

prepared by:

Mrs. Asmaa Sakr



SCAN ME

Trust Academy Online

First Question: **Choose the right answer:**

1 $\frac{5}{6} \div \frac{1}{3} = \ldots\ldots$

ⓐ $\frac{5}{2}$ ⓑ $1\frac{1}{4}$
ⓒ $\frac{3}{2}$ ⓓ $\frac{4}{5}$

2 The reciprocal of the number …… is $\frac{5}{8}$



ⓐ $\frac{3}{8}$ ⓑ $\frac{5}{8}$
ⓒ $3\frac{1}{5}$ ⓓ $1\frac{3}{5}$

3 $5.2 \times 0.3 = \ldots\ldots$

ⓐ 0.156 ⓑ 1.56
ⓒ 15.6 ⓓ 156

4 $45 \div 0.9 = \ldots\ldots \div 9$

ⓐ 0.45 ⓑ 450
ⓒ 45 ⓓ 4.5

5 $\frac{2}{5}$ of $30 = \ldots\ldots$

ⓐ 12 ⓑ 2
ⓒ 6 ⓓ 30

6 The reciprocal of $\frac{1}{5}$ is ……

ⓐ 10 ⓑ 5
ⓒ 0 ⓓ $\frac{2}{5}$

7 How many halves are there in 2?

ⓐ 4 ⓑ 6
ⓒ 8 ⓓ 10

8. $72.3 \div 0.01 = ...$

ⓐ 7.230
ⓑ 0.723
ⓒ 723
ⓓ 72.3

9. $4.26 \times 0.14 ...... 42.6 \times 0.014$

ⓐ $>$
ⓑ $<$
ⓒ $=$
ⓓ $\leq$

10. If you need to buy 1.5 kilograms of apples for your mother at a cost of 32.5 LE per kilogram, how much would you pay?

ⓐ 4875 L.E
ⓑ 48.75 L.E
ⓒ 487.5 L.E
ⓓ 4.875 L.E

11. $3.6 \div 0.12 = ...$

ⓐ 30
ⓑ 3
ⓒ 0.3
ⓓ 0.03

12. $\frac{2}{5} \div \frac{4}{15} = ...$

ⓐ $\frac{4}{5}$
ⓑ $\frac{2}{15}$
ⓒ $\frac{2}{3}$
ⓓ $1\frac{1}{2}$

13. The reciprocal of 5 is ......

ⓐ $\frac{1}{5}$
ⓑ $\frac{3}{5}$
ⓒ $\frac{5}{5}$
ⓓ 5

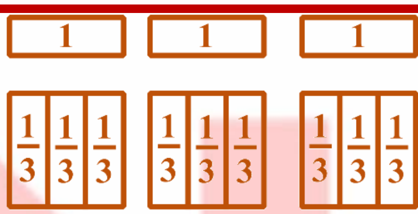
14. $1.5 \times .... = 150$

ⓐ 0.1
ⓑ 1000
ⓒ 100
ⓓ 10

15 $\ldots\ldots \div 0.3 = 12 \div 3$

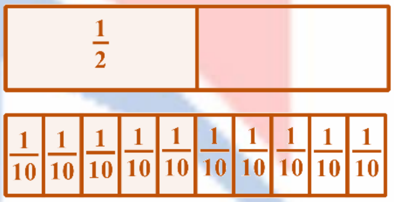
ⓐ 0.12 ⓑ 1.2
ⓒ 12 ⓓ 120

16 By using the opposite model what is the quotient of $3 \div \frac{2}{3}$?



ⓐ 2 ⓑ $\frac{3}{2}$
ⓒ $4\frac{1}{2}$ ⓓ $\frac{2}{3}$

17 You can use the opposite model to solve the problem.



ⓐ $\frac{1}{10} \div \frac{1}{2}$ ⓑ $\frac{1}{10} \div 5$
ⓒ $\frac{1}{2} \div 5$ ⓓ $\frac{1}{2} \div 10$

18 $\frac{7}{9} \times 3 \ldots\ldots \frac{7}{9} \div \frac{1}{3}$

ⓐ $>$ ⓑ $<$
ⓒ $=$ ⓓ Otherwise

19 $1.2 \times 1.2 = \ldots\ldots$

ⓐ 144 ⓑ 14.4
ⓒ 1.44 ⓓ 0.144

20 $6 \div \frac{2}{3} = \ldots\ldots$

ⓐ 4 ⓑ $\frac{1}{4}$
ⓒ 9 ⓓ $\frac{1}{9}$



21 $\frac{3}{5} \div \ldots\ldots = 1$

ⓐ $\frac{5}{3}$ ⓑ $\frac{5}{5}$
ⓒ $\frac{3}{5}$ ⓓ 1

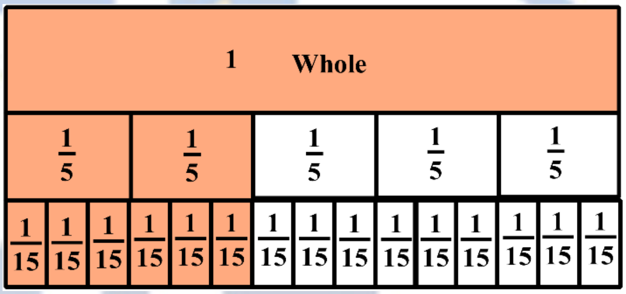
22 $\frac{3}{4} \div 2 = \ldots\ldots$

ⓐ $\frac{3}{8}$ ⓑ $\frac{6}{4}$
ⓒ $\frac{4}{6}$ ⓓ $\frac{3}{2}$

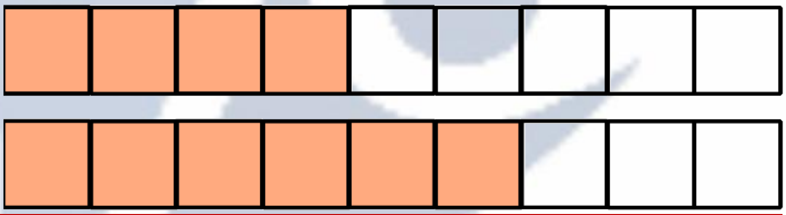
Second Question: Answer the following:

1 **Divide using the forms shown:**

ⓐ $\frac{2}{5} \div 3 = \frac{2}{15}$



ⓑ $\frac{4}{9} \div \frac{2}{3} = \frac{4}{6} = \frac{2}{3}$



2 A rectangle with an area of 10.25 square meters and a length of 4.1 m. Calculate the width and perimeter of the rectangle?

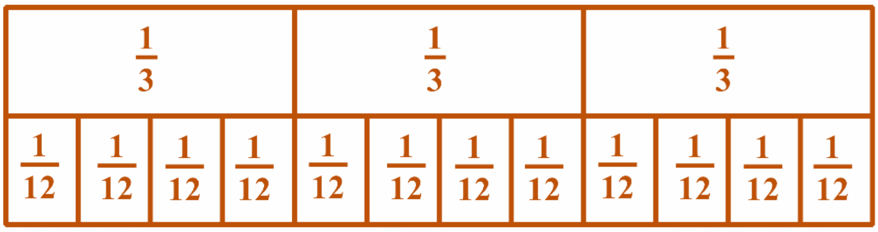
Width $= 10.25 \div 4.1 = 2.5$ meters.

3 Omar covered $\frac{3}{5}$ kilometer in 3 laps.
What is the distance he covered in one Lap?

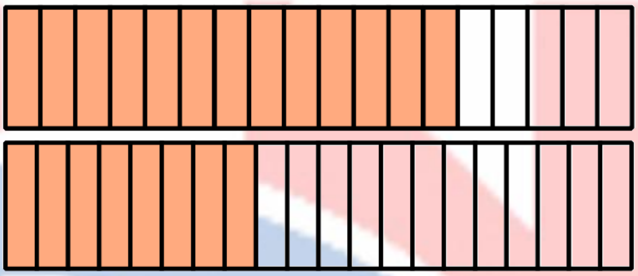
The distance covered in 1 lap $= \frac{3}{5} \div 3 = \frac{3}{5} \times \frac{1}{3} = \frac{1}{5}$ km.

4 **By using the modeling division find the quotient:**

ⓐ $\frac{2}{3} \div 4 = \frac{2}{12} = \frac{1}{6}$



ⓑ $\frac{3}{4} \div \frac{2}{5} = \frac{15}{8}$



5 **Find:**

ⓐ $4.48 \div 0.8 = 6.05$

ⓑ $14.3 \times 5.3 = 75.79$

ⓒ $\frac{2}{3}$ of $\frac{3}{2} = 1$

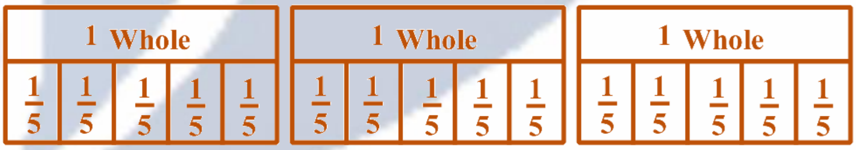
ⓓ $4 \div \frac{4}{3} = 3$

6 **Youssef has 5.25 meters of ribbon. He wants to split it into equal pieces of 0.25 meters each. How many pieces will he have?**

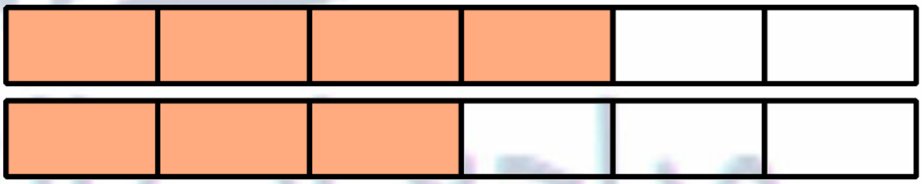
The number of pieces $= 5.25 \div 0.25 = 21$ pieces.

7 **Divide using the forms shown:**

ⓐ $3 \div \frac{4}{5} = 3\frac{3}{4}$



ⓑ $\frac{2}{3} \div \frac{1}{2} = \frac{4}{3} = 1\frac{1}{3}$



8 **Hiyam bought 17 boxes of juice; the price of each one is 2.25 pounds. How many pounds did she pay the seller?**

Number of pounds $= 17 \times 2.25 - 38.25$ pounds.

First Question: Choose the right answer:

1 $25:50 = \ldots\ldots$

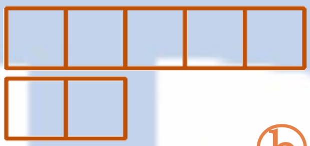
ⓐ $10:5$ ⓑ $1:2$

ⓒ $2:1$ ⓓ $5:1$

2 If $\frac{3}{4} = \frac{x}{28}$, then $x = \ldots\ldots$

ⓐ 7 ⓑ 12

ⓒ 21 ⓓ 24

3 The tape diagram  represents the ratio ……

ⓐ $5:2$ ⓑ $3:2$

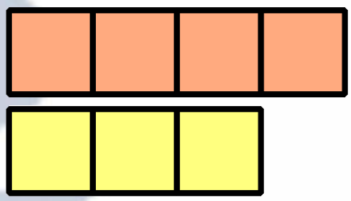
ⓒ $7:2$ ⓓ $2:3$

4 Which of the following is equivalent to $5:6$?

ⓐ $20:24$ ⓑ 24 to 20

ⓒ $6:5$ ⓓ $24:12$

5 In the opposite figure, the ratio between number of red squares and number of green squares $= \ldots\ldots$



ⓐ $3:8$ ⓑ $4:3$

ⓒ $3:5$ ⓓ $3:4$

6 The second term in the ratio $\frac{7}{9}$ is ……

ⓐ 7 ⓑ 9

ⓒ 16 ⓓ 2

7 Which of the following is NOT equivalent to $\frac{7}{11}$?

ⓐ $\frac{14}{22}$ ⓑ $\frac{14}{18}$

ⓒ $\frac{21}{33}$ ⓓ $\frac{70}{110}$

8 $2:12$ is equivalent to ……

ⓐ $12:48$ ⓑ $6:18$
ⓒ $4:12$ ⓓ $1:6$

9 The ratio $72:9$ in the simplest form is ……

ⓐ $9:2$ ⓑ $18:81$
ⓒ 8 ⓓ $20:45$

10 If $\frac{5}{9} = \frac{15}{x}$, -, then the value of $x =$ ……

ⓐ 3 ⓑ 5
ⓒ 15 ⓓ 27

11 If $15:x - 1 = 4:8$, then the value of $x =$ ……

ⓐ 15 ⓑ 31
ⓒ 17 ⓓ 16

12 Ahmed needs to study 21 hours to finish his weekly homework, then the rate of his study per day is …… /hr.

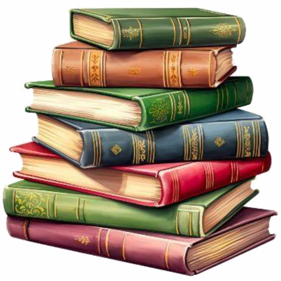
ⓐ 2 ⓑ 3
ⓒ 4 ⓓ 12

13 If the age of Omar is 15 years, and the age of his father is 45 years old, then the ratio between the age of Omar and his father = …….

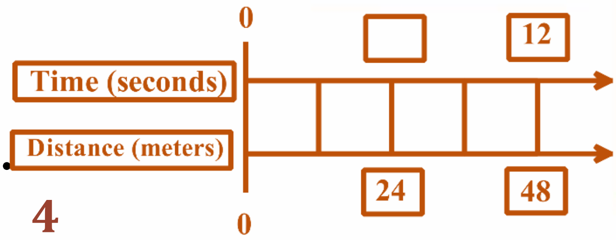
ⓐ $1:2$ ⓑ $1:3$
ⓒ $1:4$ ⓓ $1:5$

14 54 LE. for 9 kg, then the cost of 6 kg is …… L.E

ⓐ 36 ⓑ 9
ⓒ 27 ⓓ 45



15 The missing number in the opposite double number line is ……



ⓐ 2 ⓑ 4
ⓒ 3 ⓓ 6

16 If the ratio between a and b is 1:3 and their sum is 16, then b = …….

ⓐ 12 ⓑ 4
ⓒ 16 ⓓ 9

17 If $\frac{1}{6} = \frac{3}{18}$, then $3 \times 6 = 18 \times$ …….

ⓐ 1 ⓑ 3
ⓒ 6 ⓓ 18

18 If $\frac{20}{25} = \frac{m}{5}$, then the value of $m =$ ……

ⓐ 2 ⓑ 3
ⓒ 4 ⓓ 1

19 If ratio between number of boys and girls is 3:5 then the ratio between girls to total number is ……

ⓐ 3:5 ⓑ 3:8
ⓒ 5:8 ⓓ 5:2

20 Salma reads 140 pages of stories weekly, then she reads …… pages daily.

ⓐ 20 ⓑ 7
ⓒ 14 ⓓ 70

21 Adam has 36 LE and Lojy has 12 LE, then the ratio of what Lojy has to what Adam has is …… : ……

ⓐ 1:8 ⓑ 8:3
ⓒ 1:3 ⓓ 6:12



22 $45:35 = \ldots\ldots : \ldots\ldots$

ⓐ $9:7$ ⓑ $4:7$

ⓒ $7:5$ ⓓ $5:4$

23 $\frac{5}{15}$ and $\frac{3}{4}$ are ……

ⓐ equivalent ratio ⓑ not equivalent ratio

24 The ratio between two numbers is 1: 7. If the first number becomes 6, then the second number is ……

ⓐ 42 ⓑ 14

ⓒ 24 ⓓ 16

Second Question: Answer the following:

1 Adham wants to plant trees, He takes 11 minutes to plant 3 trees, complete the following table:

Trees	3	6	12	15
Time	11	22	44	55

2 The ratio between height of Khaled and Seif 3:2 if height of Seif 120 cm. Find the height of Khaled.

Khaled | 60 | 60 | 60 |

Seif | 60 | 60 |

Each box $= 120 \div 2 = 60$

The height of Khaled $= 60 \times 6 = 180$ cm

3 Show which of the following ratios are equivalent and which are not equivalent.

ⓐ $\frac{20}{24}, \frac{18}{27}$

$20 \times 27 = 540$, $24 \times 18 = 432$

So, $\frac{20}{24}$ and $\frac{18}{27}$ are NOT equivalent ratio.

ⓑ $\frac{36}{18}$, $\frac{48}{24}$

$\frac{36 \div 18}{18 \div 18} = \frac{2}{1}$, $\frac{48 \div 24}{24 \div 24} = \frac{2}{1}$

So, $\frac{36}{18}$ and $\frac{48}{24}$ are equivalent ratio.



4 **Find each ratio in simplest form:**

ⓐ $49:56 = \frac{49 \div 7}{56 \div 7} = \frac{7}{8}$

ⓑ $24:30 = \frac{24 \div 6}{30 \div 6} = \frac{4}{5}$

5 **The total number of students in a school is 420, if the number of boys is 240, find the number of girls, then find the ratio between number of girls and the number of boys in the simplest form?**

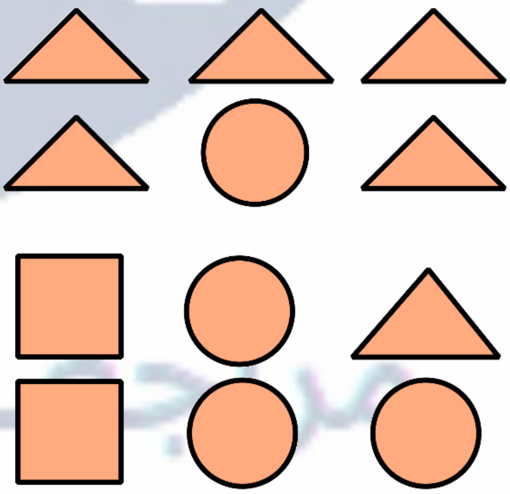
The number of girls = 420 − 240 = 180

Girls : Boys

240 : 180

4 : 3

6 **In the following figures:**



ⓐ The ratio of the number of squares to the number of circles in the simplest form is 1 : 2

ⓑ The ratio of the number of squares to the number of triangles in the simplest form is 1: 3

First Question: **Choose the right answer:**

UNIT 10

1. Ahmed studies 24 pages in 6 hours, then the unit rate of his study is …… pages per hour.

ⓐ 5 ⓑ 4
ⓒ 3.5 ⓓ 5.5

2. $1 - \frac{3}{4} = \ldots\ldots\ \%$

ⓐ 25 ⓑ 2.5
ⓒ $\frac{1}{4}$ ⓓ 0.25

3. The value of 30% of 120 equals ……

ⓐ 50 ⓑ 75
ⓒ 36 ⓓ 100

4. The percentage that represents 650 LE of 1,000 LE is ……

ⓐ 650% ⓑ 65%
ⓒ 350% ⓓ 35%

5. $5.32m = \ldots\ldots\ cm$

ⓐ 0.0532 ⓑ 523
ⓒ 532 ⓓ 5320

6. 3 Liters = ……. Milliliters.

ⓐ 3 ⓑ 30
ⓒ 300 ⓓ 3000

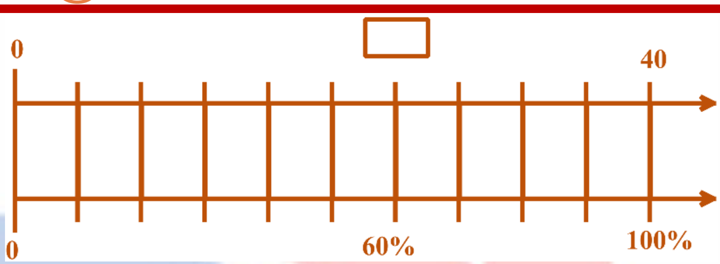
7. 1% of 600 L.E = ……. L.E

ⓐ 100 ⓑ 60
ⓒ 6 ⓓ 0.6

8 If a car consumes $\frac{1}{10}$ liter of petrol to cover 1 km, then it covers …… Km per liter.

ⓐ 1 ⓑ 5
ⓒ 10 ⓓ 20

9 From the opposite double number line.
60% of 40 = ……



ⓐ 4 ⓑ 24
ⓒ 240 ⓓ 18

10 If 15 L.E for 3 kg, then the cost of 25 kg is …… L.E

ⓐ 15 ⓑ 150
ⓒ 25 ⓓ 125

11 Which of the following is NOT a conversion factor?

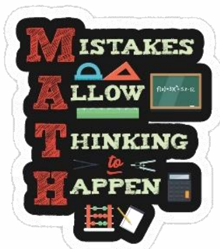
ⓐ $\frac{60min}{1sec}$ ⓑ $\frac{1L}{1000ml}$
ⓒ $\frac{1000m}{1km}$ ⓓ $\frac{1day}{24hr}$

12 $\frac{1}{4}$ = …… %

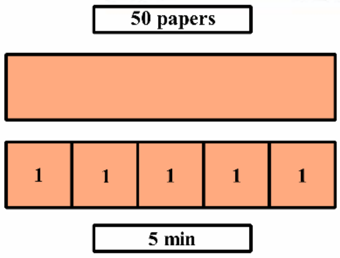
ⓐ 20 ⓑ 50
ⓒ 25 ⓓ 75

13 50% …… $\frac{3}{4}$

ⓐ > ⓑ <
ⓒ = ⓓ Otherwise



14 From the opposite tape diagram, the unit rate of the printer is ......



ⓐ 250 ⓑ 50
ⓒ 10 ⓓ 25

---

15 $1\frac{1}{2} = \ldots\ldots\ \%$

ⓐ 5 ⓑ 150
ⓒ $1\frac{1}{2}$ ⓓ 1500

---

16 20 cups of flour to make 5 pizza, then ...... pizza per cup of flour.

ⓐ 100 ⓑ 4
ⓒ $\frac{1}{5}$ ⓓ $\frac{1}{4}$

---

17 The percentage that represents 340 L.E. of 1.000 L.E. is ......

ⓐ 340% ⓑ 34%
ⓒ 3.4% ⓓ 3.5%

---

18 $1 - [30\% + 20\%] = \ldots\ldots$

ⓐ 0.45 ⓑ 5%
ⓒ $\frac{1}{2}$ ⓓ 50

---

19 ...... gm = 20 kg

ⓐ 0.02 ⓑ 2000
ⓒ 200 ⓓ 20000

---

20 $20\% \ldots\ldots \frac{2}{5}$

ⓐ $>$ ⓑ $<$
ⓒ $=$ ⓓ Otherwise



21 The value of 10% of 4,200 L.E is ……

ⓐ 420 ⓑ 42
ⓒ 12 ⓓ 210

22 90% of …… = 360

ⓐ 0.4 ⓑ 4
ⓒ 40 ⓓ 400

23 255% = ……

ⓐ $1\frac{25}{100}$ ⓑ $2\frac{25}{200}$
ⓒ $2\frac{1}{4}$ ⓓ 0.225

24 Noah spends 48 pounds in 6 days, then he will spend …… L.E in 10 days.

ⓐ 240 ⓑ 60
ⓒ 80 ⓓ 40

Second Question: Answer the following:

1 A factory (A) produces 600 lamps in 40 hours, another factory (B) produces 700 lamps from the same kind in 50 hours, which factory has a better rate of production?

Rate 1600 + 40 = 15 lamps/hour

Rate 2700 + 50 = 14 lamps/hour 1st is better

2 If the price of 4 kilograms of cheese is 800 L.E. Find the price of 3 kilograms of the same cheese

Unit rate = $\frac{800\ L.E}{4\ Kg}$ = 200 L.E per kg.

The Price of 3 Kg = 3 × 200 = 600 L.E

3 Which is best buy?

15 kg per 30 L.E OR 12. 5 L.E per 5 K.g

First unit rate $= \frac{15Kg}{30L.E} = \frac{1}{2}$ Kg per L.E

Second unit rate $\frac{5kg}{12.5L.E} = \frac{2}{5}$ Kg per L.E

Since $\frac{1}{2} > \frac{2}{5}$, Si the first is the best.

---

4 A man bought a T.V set. He was given a 10% discount of its marked price, was 10,000 L.E. Find its price after discount.

10% of $10000 = 1000$

So, the price after discount $= 10000 - 1000 = 9000$ L.E

---

5 A speed of a car is 180 kilometers per hour. convert its speed to meters per minute.

$\frac{180km}{1hr} \times \frac{1000m}{1km} \times \frac{1hr}{60min} = 3000$ m per min.

---

6 An iPad that costs 20,800 LE with discount of 20% off. Find:

ⓐ The money saved.

10% of 20800 L.E $= 2080$ L.E

20% of 20800 L.E (saved money)

$= 2080 \times 2 = 4160$ L.E

ⓑ The sale price of the iPad.

The sale price $= 20800 - 4160 = 16640$ L.E



First Question: Choose the right answer:

UNIT 11

1. The point $(-2, 3)$) lies in the …… quadrant

ⓐ first ⓑ second
ⓒ third ⓓ fourth

2. The point $(-4, 9)$ located at distance …… units from x-axis.

ⓐ 4 ⓑ 9
ⓒ 13 ⓓ 5

3. If the point at the position $(-1, 3)$ has moved 2 units to the right and 4 units downwards then its new position is ……

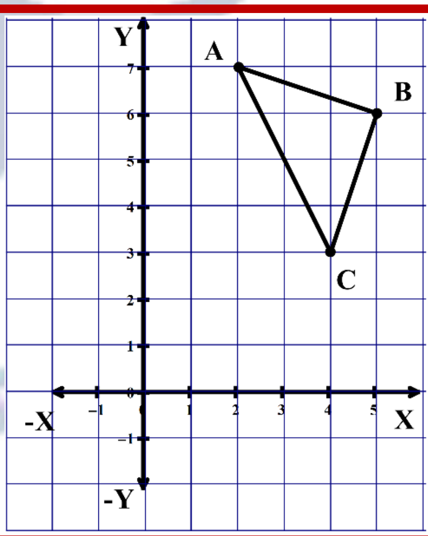
ⓐ $(-3, 7)$ ⓑ $(0, 7)$
ⓒ $(1, -1)$ ⓓ $(3, 1)$

4. In the opposite figure:
The distance between the two points A and B = ……



ⓐ 20 ⓑ 210
ⓒ 400 ⓓ 400

5. In the opposite figure:
Which set of ordered pairs shows the coordinates of the points A, Band C?



ⓐ $(7, 2), (6, 5), (3, 4)$
ⓑ $(7, 2), (5, 6), (3, 3)$
ⓒ $(2, 7), (5, 6), (4, 3)$
ⓓ $(2, 7), (6, 5), (4, 3)$

6 Laila plotted a point on a coordinate plane to represent the ordered pair (7.4). Which statement is true about the x-coordinate in the ordered pair?

ⓐ The x-coordinate is 7 units up from the x-axis.
ⓑ The x-coordinate is 7 units to the right of the y-axis.
ⓒ The x-coordinate is 4 units below the x-axis
ⓓ The x-coordinate is 4 units to the right of the y-axis

7 The points $(1, -1), (2 - 2), (4, -5), (-3, -4)$ ……

ⓐ lie in the second quadrant.
ⓑ lie in the third quadrant
ⓒ lie in the fourth quadrant
ⓓ do not lie in the same quadrant

8 Point $C(5, -3)$ lies in the …… quadrant.

ⓐ first ⓑ second
ⓒ third ⓓ fourth

9 The distance between the two points $(-5, 6)$ and $(-5, 2)$ is length units ……

ⓐ -5 ⓑ 4
ⓒ 8 ⓓ 0

10 The distance between -6 and 5 on the number line is …… units.

ⓐ 1 ⓑ -1
ⓒ 11 ⓓ 5

11 The two points $(3, -7)$ and $(-6, -7)$ lie on the same ……

ⓐ horizontal line ⓑ vertical line
ⓒ inclined line ⓓ otherwise



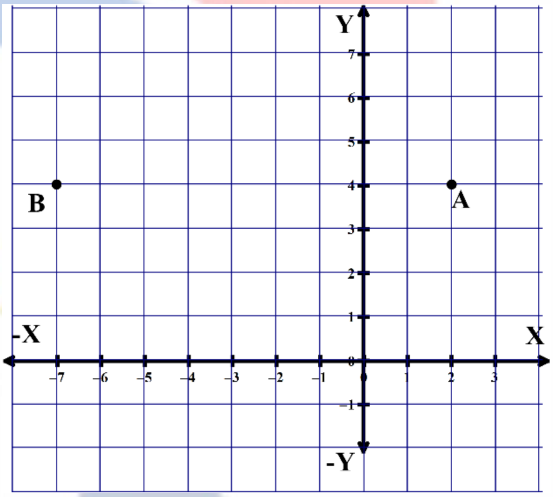
12 Plot the points $O(0.0), A\ (3.0), B(3,4), C(0,4)$ and draw overline $\overline{OA}$, $\overline{AB}$, $\overline{BC}$ and $\overline{CO}$ which figure is obtained?

ⓐ Square ⓑ Rectangle
ⓒ Trapezium ⓓ Rhombus

13 Which point is a reflection of (12, - 8) across the y-axis on a coordinate plane?

ⓐ $(-12, -8)$ ⓑ $(8, 12)$
ⓒ $(-8, 12)$ ⓓ $(12, 8)$

14 the opposite coordinate plane, the length of $AB =$ …… units.

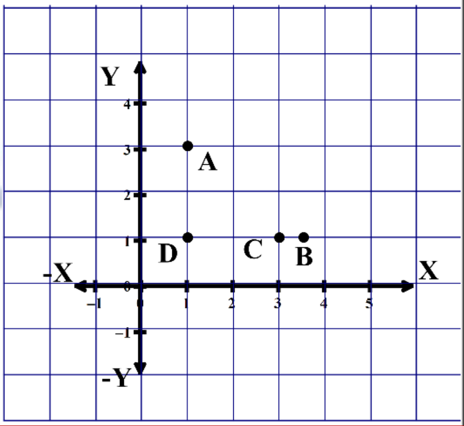


ⓐ 7
ⓑ 9
ⓒ 14
ⓓ -9

15 Which is true of all points in the second quadrant?

ⓐ positive x-coordinate, positive y-coordinate
ⓑ negative x-coordinate, negative y-coordinate
ⓒ negative x-coordinate, positive y-coordinate
ⓓ positive x-coordinate, negative y-coordinate

16 Use the opposite graph to answer the question. Which point is located at $(3\frac{1}{2}, 1)$?



ⓐ Point A
ⓑ Point B
ⓒ Point C
ⓓ Point D

17 Which of the following points lies in the 2nd quadrant?

ⓐ $(-4, 3)$ ⓑ $(0, -7)$

ⓒ $(1, 9)$ ⓓ $(7, 0)$

18 If the point $(x, -3)$ lies in the 3rd quadrant, then the value of x is ……

ⓐ 2 ⓑ 7

ⓒ -3 ⓓ 5

19 The image of the point $(2, -9)$ by reflection on the x-axis is ……

ⓐ $(2, 9)$ ⓑ $(-9, 2)$

ⓒ $(-2, -9)$ ⓓ $(-2, 9)$

20 Which point of the following can be a vertex of a right-angled triangle if the other vertices are $(0, 8)$ and $(4, 0)$?

ⓐ $(0, 1)$ ⓑ $(0, -1)$

ⓒ $(0, 0)$ ⓓ $(1, 1)$

21 The point …… lies on the x-axis.

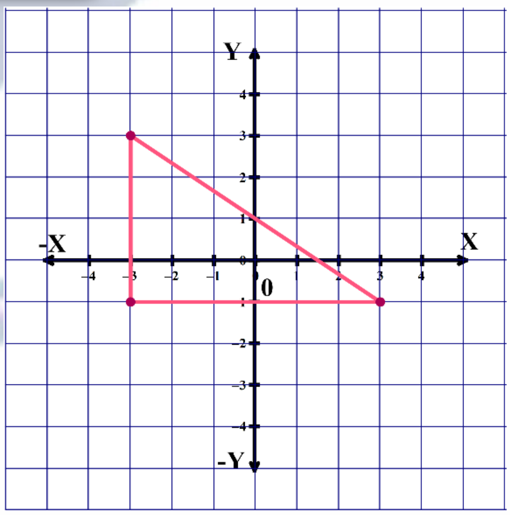
ⓐ $(6, -7)$ ⓑ $(0, -2)$

ⓒ $(-3, 0)$ ⓓ $(4, 2)$

Second Question: Answer the following:

1 Using graph paper:
Plot the points $(-3, 3)$, $(3, -1)$, and $(-3, -1)$, and connect them.
Does the resulting figure form a right triangle? If yes, what are the coordinates of the vertex of the right angle?

Yes, $(-3, -1)$



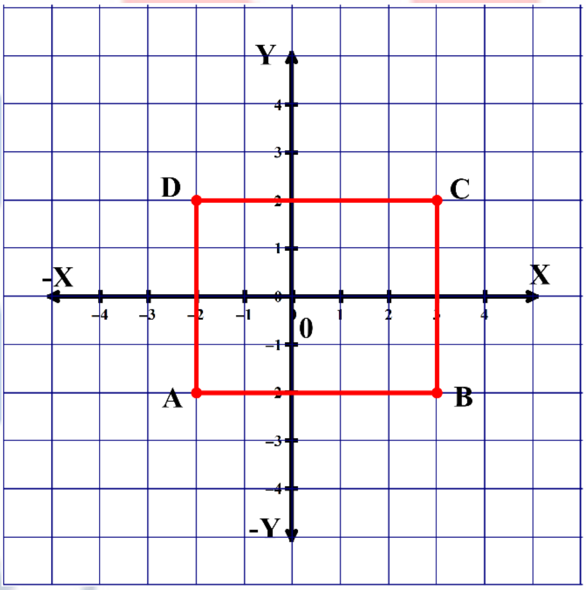
2 You are at $(-1, 0)$ Move 2 units left and 5 units up.
Where do you land $(-3, 5)$

---

3 Find the distance between $C(3, -4)$ and $D(3, -2)$
$|-4| - |-2| = 4 + 2 = 2$ units.

---

4 Plot the points
$A(-2, -2), B(3, -2), C(3, 2)$
and $D(-2, 2)$
on the coordinate plane what
is the name of the figure ABCD?
Rectangle.



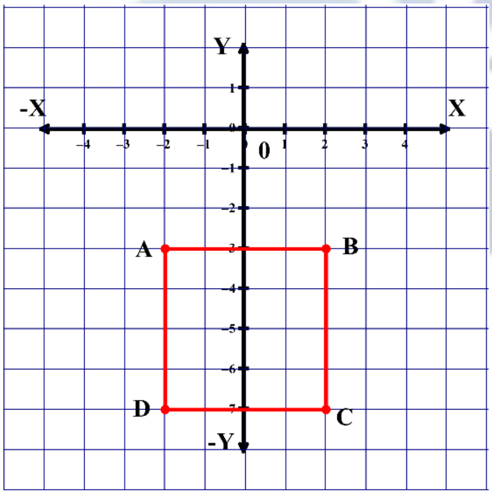
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5 Graph the points $A(-2, -3)$ and $B(2, -3)$ What are the coordinates of C and D. IF ABCD is a square?

(Two answers are possible) C (…… , ……) , D (…… , ……)

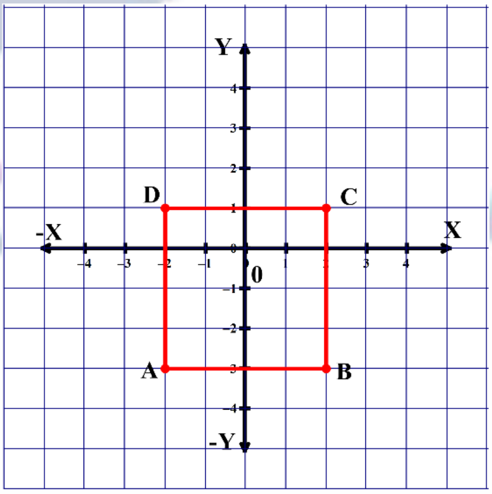
First Case:

$C(2, -7)$, $D(-2, -7)$

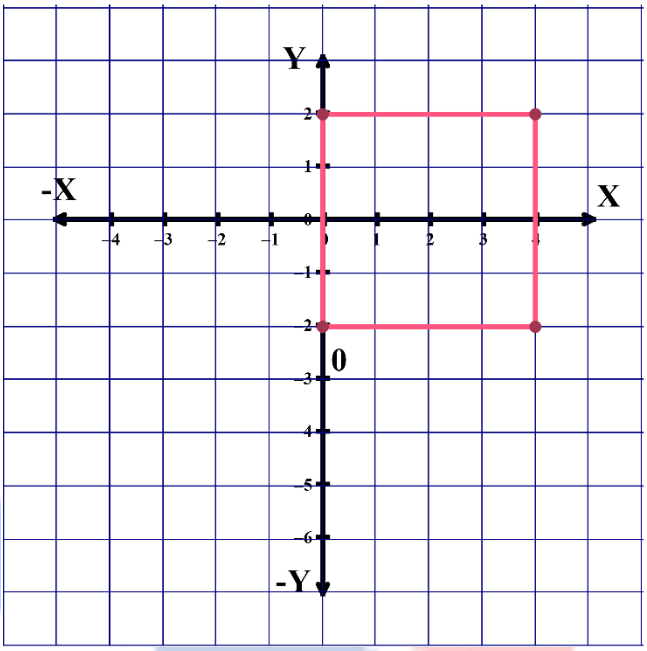


, Second Case:

, $C(2, 1)$, $D(-2, 1)$



6 Using graph paper:
Plot the point $(0, -2)$ as a vertex of a square with a side length of 4 units. Determine the coordinates of the other three vertices to complete the square.
$(4, -2)$, $(4, 2)$, $(0, 2)$
(Answers may vary)



UNIT 12

First Question: Choose the right answer:

1 A …… is a parallelogram with equal sides and four right angles.
ⓐ square ⓑ rectangle
ⓒ rhombus ⓓ trapezium

2 If the base length of a parallelogram is 8 cm and its corresponding height is 4 cm, then its area is …… cm^2
ⓐ 2 ⓑ 12
ⓒ 32 ⓓ 16

3 If the area of a triangle is 12 cm^2 and its base is 4 cm, then its height is …… cm.
ⓐ 5 ⓑ 6
ⓒ 10 ⓓ 48

4 The number of heights of any triangle is ……
ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

5 Area of a parallelogram = ……

ⓐ $\frac{1}{2} \times b \times h$　ⓑ $b \times h$

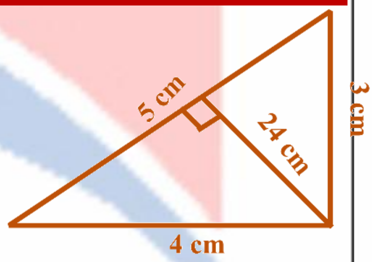
ⓒ $2 \times b \times h$　ⓓ $\frac{b \times h}{4}$

6 If the side length of a rhombus is 10 cm and it's height 3.4 cm, then it's area …… cm^2

ⓐ 34　ⓑ 43

ⓒ 340　ⓓ 3400

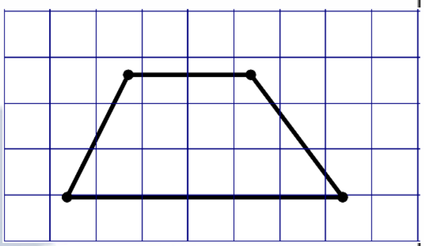
7 Which expression represents the area of the drawn triangle?



ⓐ $\frac{1}{2} \times 3 \times 5$　ⓑ $\frac{1}{2} \times 24 \times 4$

ⓒ $\frac{1}{2} \times 3 \times 4$　ⓓ $\frac{1}{2} \times 4 \times 5$

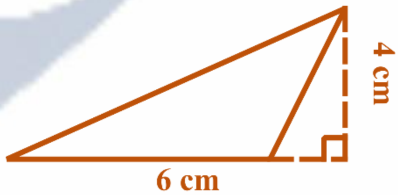
8 The area of the drawn trapezium = ……. square units.



ⓐ 27　ⓑ 13.5

ⓒ 18　ⓓ 54

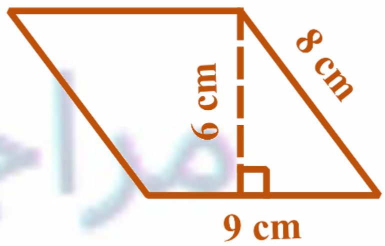
9 The area of the drawn triangle = …… cm^2



ⓐ 10　ⓑ 12

ⓒ 24　ⓓ 48

10 The area of the opposite parallelogram = …… cm^2.



ⓐ 72　ⓑ 54

ⓒ 34　ⓓ 48



11 If area of a parallelogram is $50cm^2$ and the length of the base is 5 cm, then its height is ……. m.

ⓐ 10 ⓑ 16
ⓒ 250 ⓓ 18

12 The number of heights of the right triangle is ……

ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

13 If a parallelogram has dimensions $AB = 9$ cm and $BC = 13$ cm, then the length of the corresponding height to AB ……. the length of the corresponding height to BC.

ⓐ > ⓑ <
ⓒ = ⓓ Otherwise

14 A parallelogram in which all sides are equal in length is called a ……

ⓐ square ⓑ rectangle
ⓒ rhombus ⓓ trapezium

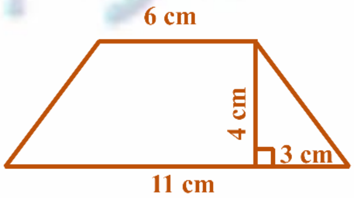
15 If the area of a triangle is 15 cm^2 and its base is 6 cm, then its height is …… cm.

ⓐ 5. 5 ⓑ 5
ⓒ 6 ⓓ 90

16 Area of a triangle = ……

ⓐ $\frac{1}{2}bb$ ⓑ $\frac{b}{2} \times h$
ⓒ $\frac{1}{2}hh$ ⓓ $b \times h$

16 The area of the opposite trapezium = ……

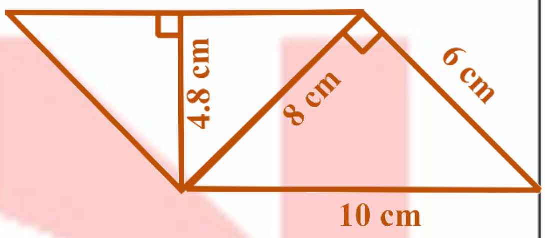


ⓐ 30 ⓑ 34
ⓒ 40 ⓓ 55

17 A rhombus of side length 14 cm and the ratio between its height and its side length is 5:7. then the area of the rhomb is …… cm^2

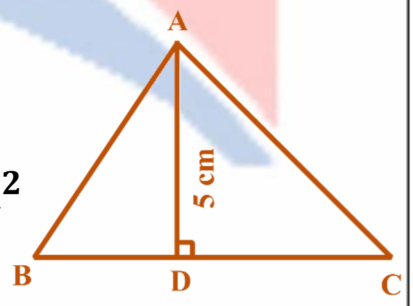
ⓐ 35 ⓑ 70
ⓒ 100 ⓓ 140

18 Which of the following expressions does represent the area of the opposite parallelogram?



ⓐ $\frac{1}{2} \times 6 \times 8$ ⓑ 6×10
ⓒ 4.8×8 ⓓ 10×4.85

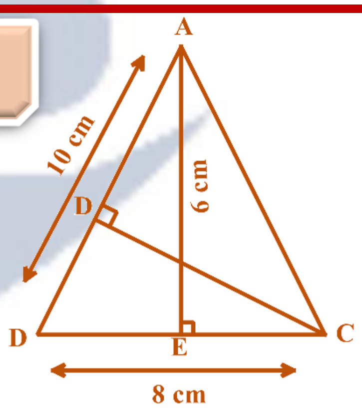
19 In the opposite figure:
ABC is a triangle in which
$\overline{AD} \perp \overline{BC}$, $AD = 5cm$. area of $\Delta ABC = 15\ cm^2$
, then $BC =$ ……



ⓐ 3 ⓑ 6
ⓒ 9 ⓓ 12

Second Question: Answer the following:

1 According to the opposite triangle, find the length of CD.



Area of the triangle $= \frac{1}{2} \times 8 \times 6 = 24\ cm^2$

$CD = \frac{24 \times 2}{10} = 4.8$ cm

2 A triangle is of base length 5 cm and its corresponding height is 2cm more than, find the area of the triangle.

The height $= 5 + 2 = 7cm$

The area of the triangle $= \frac{1}{2} \times b \times h = \frac{1}{2} \times 5 \times 7 = 17.5\ cm^2$

3 Find the area of the rhombus whose perimeter is 20 cm and its height 3.4cm

Side length $= 20 \div 4 = 5$ cm

The area of the rhombus = side length × height = $5 \times 3.4 = 17\ cm^2$

4 Which is greater in area?

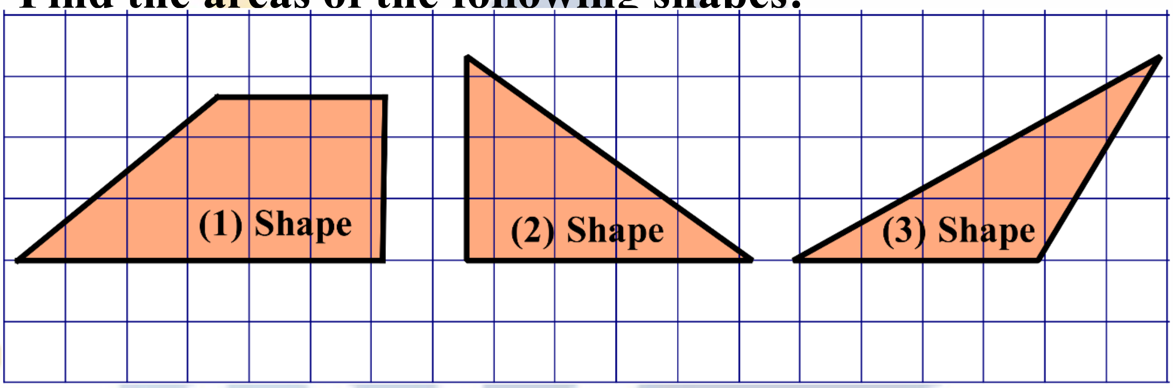
A parallelogram whose base length is 12 cm and its corresponding height in 10 cm or a rectangle whose dimensions are 14 cm and 8 cm.

The area of the parallelogram $= bh = 12 \times 10 = 120\ cm^2$

The are of the rectangle $= L \times W = 14 \times 8 = 112\ cm^2$

The are of the parallelogram is greater.

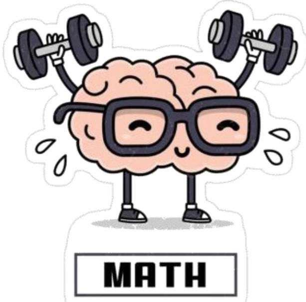
5 Find the areas of the following shapes:



The area of shape (1) $= 9 \div 4.5 = 13.5$ square units.

The area of shape (2) $= \frac{1}{2} \times 4 \times 3 = 6$ square units.

The area of shape (3) $= \frac{1}{2} \times 5 \times 3 = 7.5$ square units.



First Question: Choose the right answer:

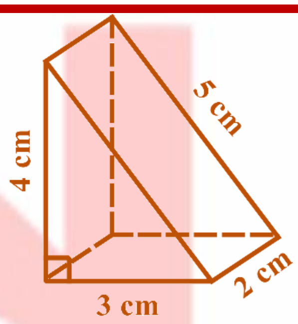
UNIT 13

1 The surface area of the cube whose side length is (s) = ……

ⓐ S × S × S ⓑ S^2

ⓒ 6 × S × S ⓓ S + S + S

2 The surface area of the opposite triangular prism is …… cm^2



ⓐ 24 ⓑ 36

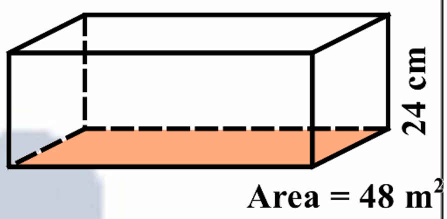
ⓒ 48 ⓓ 56

3 The volume of the cuboid = ……

ⓐ $l + w + h$ ⓑ $l \times w \times h$

ⓒ $l \times w + h$ ⓓ $l + w \times h$

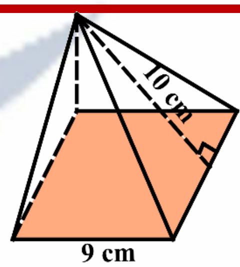
4 The volume of the opposite cuboid = …… cm^2.



ⓐ 120 ⓑ 84.2

ⓒ 224.2 ⓓ 115.2

5 The surface area of the opposite square pyramid is …… cm^2



ⓐ 148 ⓑ 156

ⓒ 240 ⓓ 261

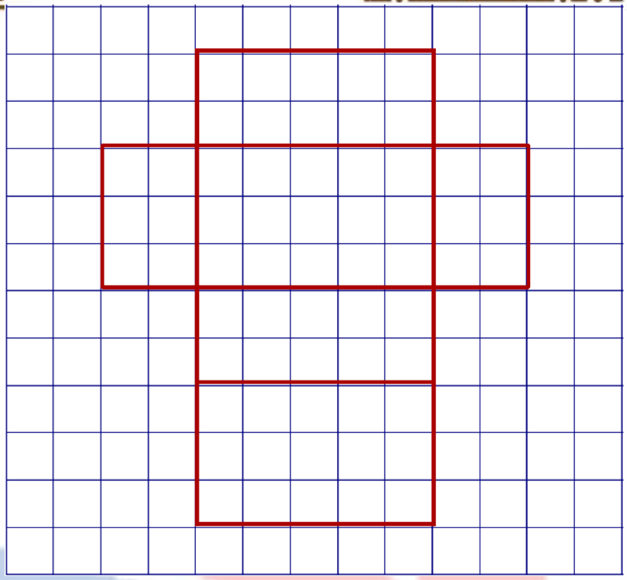
6 If the three dimensions of a cuboid are doubled, then the ratio between the new volume to the original volume of the cuboid is ……

ⓐ 8:1 ⓑ 1:8

ⓒ 4:1 ⓓ 1:4



7 The surface area of the cuboid is …… square units.



ⓐ 60
ⓑ 62
ⓒ 70
ⓓ 72

8 A cuboid whose base area is 45 cm^2, and its height is 5 cm, then its volume = …… cm^3

ⓐ 9
ⓑ 225
ⓒ 18
ⓓ 125

9 A cube with surface area of 60 cm^2. Then the area of one face is …… cm^2

ⓐ 10
ⓑ 6
ⓒ 27
ⓓ 25

10 The ratio between the area of one face and its surface area is ……

ⓐ 1: 4
ⓑ 1: 6
ⓒ 4: 1
ⓓ 6: 1

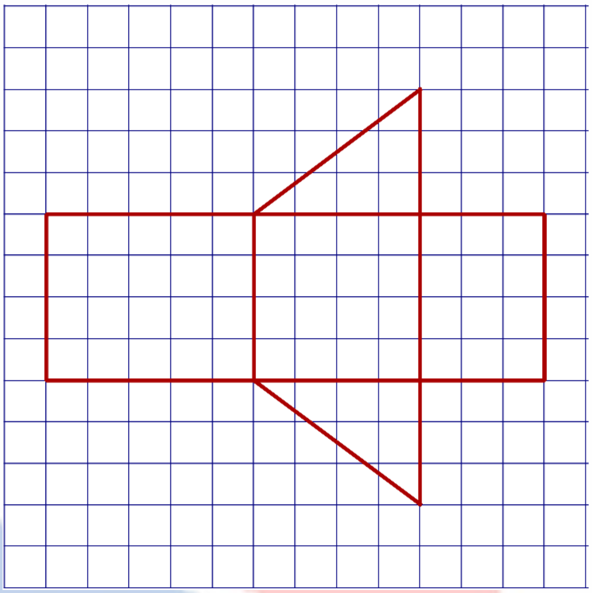
11 A cuboid has dimensions of 0.5 cm, 7 cm, and 2 cm, then its surface area = …… cm^2

ⓐ 35
ⓑ 14
ⓒ 59
ⓓ 37

12 The volume of a cuboid whose dimensions are 10 cm, 6 cm, and 3 cm is …… cm^3.

ⓐ 90
ⓑ 180
ⓒ 160
ⓓ 19

13 The surface area of the opposite triangular prism = …… square units.



ⓐ 60
ⓑ 68
ⓒ 72
ⓓ 80

14 The perimeter of one face of a cube is 28 cm, then the surface area of the cube is …… cm^2.

ⓐ 168
ⓑ 224
ⓒ 294
ⓓ 314

15 The surface area of the cuboid whose length is 12 cm, its width is 8 cm and its height is …… cm^3.

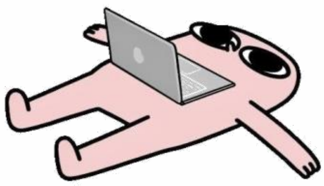
ⓐ 480
ⓑ 552
ⓒ 630
ⓓ 740

16 The volume of the cuboid whose base area is $24\frac{1}{2}$ cm^2 and its height is 18 cm equals …… cm^3.

ⓐ $882\frac{1}{2}$
ⓑ 294
ⓒ $220\frac{1}{4}$
ⓓ 441

17 The volume of a cuboid of dimensions 12 cm, 9.5 cm and $4\frac{1}{4}$ cm is …… cm^3.

ⓐ 484.5
ⓑ 540
ⓒ 432
ⓓ 480



18 A cuboid of volume 35 cm^3 of its dimensions is doubled, then the new volume of the cuboid …… cm^3.

ⓐ $17\frac{1}{2}$ ⓑ 70

ⓒ 105 ⓓ 140

19 The surface area of a cuboid with dimensions of 3 cm, 5 cm, and 7 cm is …… cm^2.

ⓐ 2×15 ⓑ $3 \times 5 \times 7$

ⓒ $2 \times (15 + 35 + 21)$ ⓓ $4 \div 10 + 20$

20 The formula for the area of a cube is ……

ⓐ $6\,s^2$ ⓑ $4\,s^2$

ⓒ $6\,s$ ⓓ s^2

21 A cubic meter is a unit of ……

ⓐ capacity ⓑ weight

ⓒ volume ⓓ time

22 If the base area of a cuboid is 80 cm^2. and its height is 9 cm. then its volume is …… cm^3.

ⓐ 720 ⓑ 72

ⓒ 360 ⓓ 810

23 The ratio between the surface area of a cube and the area of one face is ……

ⓐ $1:4$ ⓑ $1:6$

ⓒ $4:1$ ⓓ $6:1$

Second Question: **Answer the following:**

1 If the volume of a cuboid is 720 cm^3 and its height is 10 cm. Find its base area? $720 \div 10 = 72\ cm^2$

2 Doaa bought a box of chocolate for her mother, she wants to wrap the box with colored paper, find the area of the paper knowing that the dimensions of the box are 10 cm, 6 cm and 8 cm.

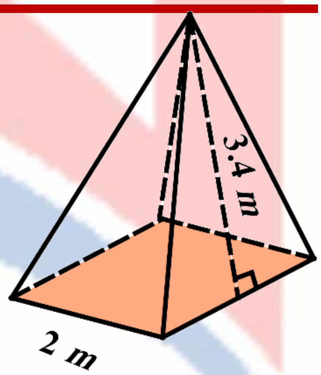
The surface area of the paper

$= 2 \times [10 \times 6 + 10 \times 8 + 6 \times 8]$

$= 2 \times [60 + 80 + 48] = 2 \times 188 = 379\ cm^2$

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3 Find the surface area of the opposite squared - based pyramid.



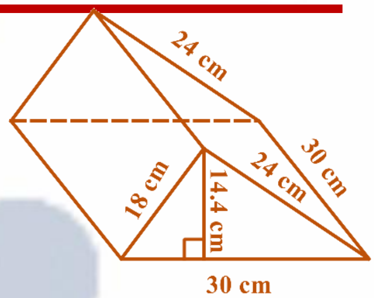
The surface area

$= [2 \times 2] + [4 \times \frac{1}{2} \times 2 \times 3.4]$

$= 4 + 13.6 = 17.6\ m^2$

---

4 Calculate the surface area of the opposite triangular prism.



The surface area

$= \left[2 \times \frac{1}{2} \times 30 \times 14.4\right] + [18 \times 30] + [24 \times 30] + [30 \times 30]$

$= 432 + 540 + 720 + 900 = 2592\ cm^2$

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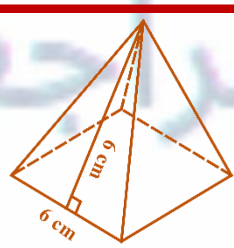
5 A cuboid with dimensions 14.3 cm, 10.2 cm and 8 cm Find the volume of the cuboid.

The volume $= 14.3 \times 10.2 \times 8 = 1166.88\ cm^3$

---

6 Answer the following:

What is the Surface area?



$36 \div 18 \times 4 = 108\ cm^2$

FINAL REVISION

First Question: Choose the right answer:

KNOWLEDGE IS POWER!

1. The reciprocal of 5 is …….

ⓐ 1 ⓑ $\frac{1}{5}$
ⓒ 15 ⓓ 5

2. If the water tap is leaking 420 liters of water in one hour, then the rate of leaking = …… L/min.

ⓐ 420 ⓑ 7
ⓒ 70 ⓓ 42

3. The number of heights of any triangle is …….

ⓐ 3 ⓑ 2
ⓒ 1 ⓓ 0

4. The ratio between the perimeter of an equilateral triangle and its side length = ……

ⓐ $1:4$ ⓑ $4:1$
ⓒ $1:3$ ⓓ $3:1$

5. 10 % of …… = 27

ⓐ 540 ⓑ 270
ⓒ 10 ⓓ 2.7

6. The distance between the point $(0, -4)$ and the origin point is …… units.

ⓐ 0 ⓑ -4
ⓒ 4 ⓓ 8

7 Which point of the following lies in the 4^{th} quadrant ……

ⓐ $(-2, 3)$ ⓑ $(-4, -3)$
ⓒ $(5, -1)$ ⓓ $(1, 1)$

8 A parallelogram which all sides are equal in length is called a ……

ⓐ square ⓑ rectangle
ⓒ rhombus ⓓ trapezium

9 The ratio between two numbers is 2: 5. If the first number became 8, then the second number will be ……

ⓐ 8 ⓑ 10
ⓒ 15 ⓓ 20

10 $\frac{2}{3} \div \frac{1}{5} = ……$

ⓐ $\frac{2}{3} \times 5$ ⓑ $\frac{3}{2} \times 5$
ⓒ $\frac{3}{4} \times \frac{1}{5}$ ⓓ $\frac{7}{3} \times \frac{1}{5}$



11 A cube with a surface area of 96 cm^2, then the edge length is …… cm.

ⓐ 4 ⓑ 3
ⓒ 27 ⓓ 16

12 $…… \div 2.15 = 1200 \div 215$

ⓐ 120 ⓑ 12
ⓒ 1.2 ⓓ 1200

13 If the volume of a cuboid is 280 cm^3, and its base area is 70 cm^2,then its height is …… cm.

ⓐ 40 ⓑ 7
ⓒ 4 ⓓ 40

14 Hany spends L.E. 120 in 4 days. What's the rate of what he spends per day?

ⓐ 50 L.E per day
ⓑ 30 L.E per day
ⓒ 15 L.E per day
ⓓ 60 L.E per day

15 2.3 pounds = …… plasters.

ⓐ 2300
ⓑ 230
ⓒ 23
ⓓ 2.3

16 If $x : 15 = 1 : 3$, then $x + 3 = \ldots\ldots$

ⓐ 5
ⓑ 8
ⓒ 9
ⓓ 11

17 If a car covers 240 km in 3 hours, then its speed is …… km/hr.

ⓐ 70
ⓑ 80
ⓒ 100
ⓓ 90

18 $\frac{3}{8} \times \ldots\ldots = 1$

ⓐ $\frac{3}{8}$
ⓑ 1
ⓒ $\frac{8}{5}$
ⓓ $2\frac{2}{3}$

19 The distance between -6 and 5 on the number line is …… unit(s).

ⓐ 1
ⓑ -1
ⓒ 11
ⓓ 5

20 The area of a triangle = ……

ⓐ $\frac{1}{2} \times b \times h$
ⓑ $b \times h$
ⓒ $W \times L$
ⓓ $\frac{1}{4} b \times h$

21 The number of heights of a right triangle is ……

ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

22 35 % of 160 = ……

ⓐ 56 ⓑ 5.6
ⓒ 0.56 ⓓ 560

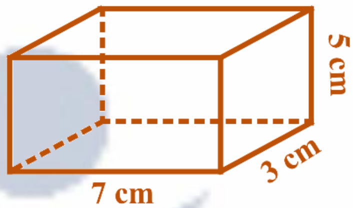
23 A carpenter needs 40 m^2 to make 10 tables, then the rate of used wood = …… m^2/table.

ⓐ 2 ⓑ 3
ⓒ 4 ⓓ 300

24 Any number multiplied by its reciprocal equals ……

ⓐ 0 ⓑ 1
ⓒ the same number ⓓ twice the number

25 The surface area of the following cuboid is …… cm^2



ⓐ 105 ⓑ 70
ⓒ 142 ⓓ 35

26 The number of heights of a right-angled triangle is ……

ⓐ 0 ⓑ 1
ⓒ 2 ⓓ 3

27 The formula for the area of one face of a cube is ……

ⓐ $6S^2$ ⓑ $4S^2$
ⓒ $6S$ ⓓ S^2

28 Point C (-5, -3) lies on the …… quadrant.

ⓐ first ⓑ third
ⓒ second ⓓ fourth

29 The area of a parallelogram is 54 cm^2, and its base length is 9 cm, then its corresponding height = …… cm.

ⓐ 54 ⓑ 6
ⓒ 9 ⓓ 18

30 The two points (3, -7) and (3, -3) lie on the same ……

ⓐ horizontal line ⓑ vertical line
ⓒ inclined line ⓓ otherwise

31 A cubic meter is a unit of ……

ⓐ capacity ⓑ volume
ⓒ mass ⓓ length

32 The image of the point (0, 5) by reflection on Y-axis is ……

ⓐ $(5, 0)$ ⓑ $(0, -5)$
ⓒ $(5, -5)$ ⓓ itself

33 If $3: 5 = 12: 4x$, then $x =$ ……

ⓐ 20 ⓑ 24
ⓒ 5 ⓓ 10

34 If $25 \times 33 = 825$, then $0.25 \times 3.3 =$ ……

ⓐ 82.5 ⓑ 8.25
ⓒ 0.852 ⓓ 0.825

35 $1 - \frac{3}{4} =$ …… %

ⓐ 25 ⓑ 2.5
ⓒ $\frac{1}{4}$ ⓓ 0.25

36 A factory produces 5,400 cans of soda in 9 hours, then the rate of production = …… cans/hour.

ⓐ 6 ⓑ 60

ⓒ 600 ⓓ 6000

37 $45 \div 0.9 = \ldots\ldots \div 9$

ⓐ 0.45 ⓑ 450

ⓒ 45 ⓓ 4.5

38 If the y-coordinate of a point is zero, then the point lies ……

ⓐ in 1st quadrant ⓑ in 3rd quadrant

ⓒ on x-axis ⓓ on y-axis

39 The volume of a cuboid whose dimensions are 6 cm, 4 cm and 1 cm equals …… cm^3.

ⓐ 10 ⓑ 12

ⓒ 48 ⓓ 24

40 The two points (3, -7) and (-6, -7) lie on the same ……

ⓐ horizontal line ⓑ vertical line

ⓒ inclined line ⓓ otherwise

41 The reciprocal of the number ……. is $4\frac{2}{5}$



ⓐ $\frac{22}{5}$ ⓑ $4\frac{5}{2}$

ⓒ $\frac{5}{22}$ ⓓ $\frac{2}{11}$

42 A parallelogram which has a right angle is called a ……

ⓐ square ⓑ rectangle

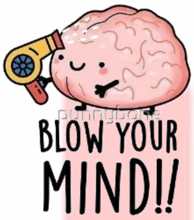
ⓒ rhombus ⓓ trapezium

43 The ratio between the perimeter of a square and its side length = ……

ⓐ $1:3$ ⓑ $3:1$

ⓒ $1:4$ ⓓ $4:1$

44 $5 \times \ldots\ldots = 1$



ⓐ $\frac{25}{5}$ ⓑ 1

ⓒ $\frac{1}{5}$ ⓓ 0

45 $\ldots\ldots = \frac{4}{7} \times \frac{5}{4}$

ⓐ $\frac{7}{4} \div \frac{5}{4}$ ⓑ $\frac{4}{7} \div \frac{4}{5}$

ⓒ $\frac{7}{4} - \frac{5}{4}$ ⓓ $\frac{1}{7} \times \frac{1}{5}$

46 $5.2 \times 0.3 = \ldots\ldots$

ⓐ 0.156 ⓑ 1.56

ⓒ 15.6 ⓓ 156

47 Malak studies 48 pages in 6 hours, then the unit rate of his study is …… pages/hour.

ⓐ 5 ⓑ 4

ⓒ 8 ⓓ 5.5

48 60 % of …… = 360

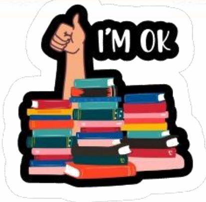
ⓐ 0.6 ⓑ 6

ⓒ 60 ⓓ 600

49 2.3 tons …… 2300 kg

ⓐ $>$ ⓑ $<$

ⓒ $=$ ⓓ Otherwise



50 Which of the following lies in the 2^{nd} quadrant?

ⓐ $(1, -1)$ ⓑ $(0, -1)$
ⓒ $(-1, 1)$ ⓓ $(1, -1)$

51 A parallelogram with area 48 cm³ and base length 6 cm, then it's corresponding height is …… cm.

ⓐ 9 ⓑ 8
ⓒ 7 ⓓ 8.5

52 A triangle with base length of 10 cm, and its corresponding height is 6 cm, then its area = …… cm^2.

ⓐ 30 ⓑ 15
ⓒ 45 ⓓ 60

53 The ratio between two numbers is 1:4. If the first number became 5, then the second number will be ……

ⓐ 42 ⓑ 14
ⓒ 20 ⓓ 16

54 If the percentage of success in a school is 76%, so the percentage of failures is …… %.

ⓐ 24 ⓑ 44
ⓒ 67 ⓓ 90

55 Which point of the following can be a vertex of a right-angled triangle if the other vertices are $(0, 8)$ and $(4, 0)$?

ⓐ $(0, 1)$ ⓑ $(0, -1)$
ⓒ $(0, 0)$ ⓓ $(1, 1)$

56 The image of the point (2,-9) by reflection across Y-axis is ……

ⓐ $(2, 9)$ ⓑ $(-9, 2)$
ⓒ $(-2, -9)$ ⓓ $(-2, 9)$

57 The distance between the points (-5,6) and (- 5, 2) = …… length units.

ⓐ -5 ⓑ 4
ⓒ 8 ⓓ 0

58 $\frac{7}{3} = \frac{15}{x} = \ldots\ldots$

ⓐ 3 ⓑ 21
ⓒ 15 ⓓ 35

59 In a restaurant, there's 10% added to each meal as a service. If the price of a meal is 240 L.E., then the price of the meal after adding the service is L.E ……

ⓐ 248 ⓑ 264
ⓒ 24 ⓓ 258

60 30 L.E for 5 kg, then the cost of 30 kg is …… L.E

ⓐ 5 ⓑ 30
ⓒ 90 ⓓ 180

Second Question: Answer the following:

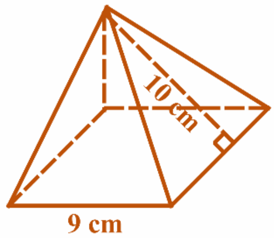
1 A rectangular prism has dimensions of 7 cm, 5 cm, and 3 cm. Find its surface area.

The surface area $= (2 \times L \times W) + (2 \times L \times H) + (2 \times W \times H)$
$= (2 \times 7 \times 5) + (2 \times 7 \times 3) + (2 \times 5 \times 3)$
$= 70 + 42 + 30 = 142\ cm^2$

2 A car consumed 640 liters of gasoline in 4 months. How many liters did the car consume on average in one month?

$640 \div 4 = 160$ liter / month.

3 Find the surface area of the opposite square-based pyramid.



The surface area $= (9 \times 9) + (4 \times \frac{1}{2} \times 9 \times 10)$

$= 81 + 180 = 261\ cm^2$

4 If you are at (-1, 0), move 5 units left and 3 units downward. Where do you land?

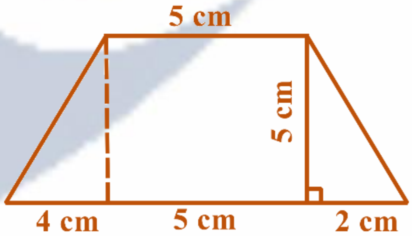
At point $(-6, -3)$

5 We ate 5 out of 10 bananas. What percentage of the bananas did we eat? Determine the part, whole, and percentage of this question?

Percentage $= 50\ \%$

Total	Part	Percentage
10	5	unknown

6 Find the area of the opposite trapezium.



The area of trapezium

$= \left(\frac{1}{2} \times 2 \times 5\right) + \left(\frac{1}{2} \times 4 \times 5\right) + (5 \times 5)$

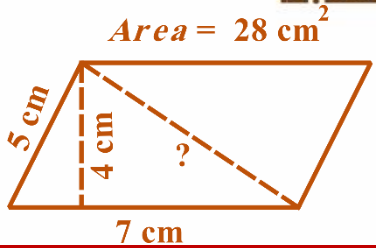
$= 5 + 10 + 25 = 40\ cm^2$

7 Find the values of y if y < 0 , and the distance between (-2, y) and (-2, 5) is 7 units.

The possible values of y are -2 and 12

but y < 0 then the correct answer is -2

8 Find the length of the missing side:



Height $= 28 \div 5 = 5.6\ cm$

9 If the ratio between two numbers is 7:4 and the smaller number is 12 Find the greater number.

$12 \div 4 = 3$

The greater number $= 7 \times 3 = 21$

10 A merchant sold 30 kilograms of bananas at a price of 17.5 pounds per kilogram.

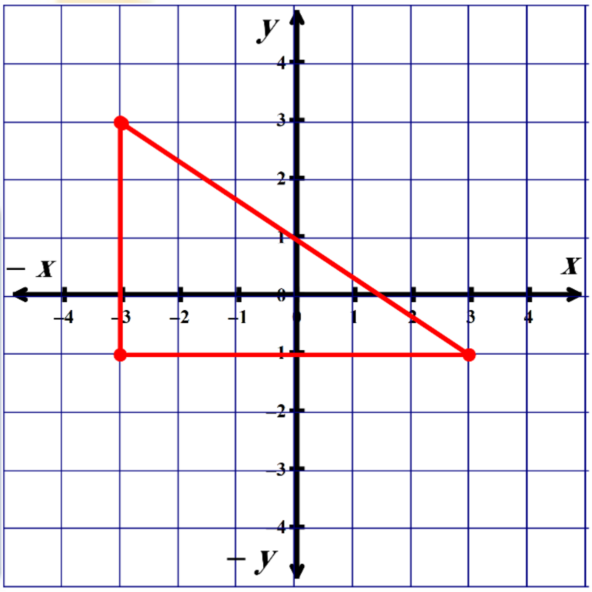
The price of the quantity of bananas

$= 30 \times 17.5 = 525$ pounds

11 By using paper graph:

Plot the points (-3, 3), (3, -1), and (-3,-1) and connect them.

Does this figure form a right triangle? If yes, what are the coordinates of the vertex of the right angle? Yes , $(-3, -1)$



12 A man bought a T.V. set he was given a 15% discount of its marked price which was 10,000 LE.

Find its price after discount.

10% of 10,000 L.E. = 1000 L.E.

5% of 10,000 L.E. = 500 L.E.

The discount = 1000 + 500=1500 L.E.

The price after discount = 10,000−1500 = 8,500 L.E

13 Find the value of: 30% of 850

$30\ \%\ \text{of}\ 850 = \frac{30}{100} \times 850 = 255$

---

14 A pyramid of metal. The square base has a side length of about 100 cm. The height of each triangular face is about 80 cm. What is the surface area of the pyramid?

$\text{Area of base} = 100 \times 100 = 10000\ cm^2$

$\text{Area of face} = \frac{1}{2} \times 100 \times 80 = 4000\ cm^2$

$\text{Total}\ 4 \times 4000 + 10000 = 26000\ cm^2$

---

15 If 437.5 LE. is distributed among the excellent pupils and each of them takes 17.5 L.E.
Find the number of excellent pupils.

$\text{The number of pupils} = 437.5 \div 17.5 = 25\ \text{pupils.}$

---

16 An animal runs at a speed of 42 km/hr. Find its speed in meters per minute.

$\text{The speed} = \frac{42km}{1hour} \times \frac{1000m}{1km} \times \frac{1hour}{60min} = 700\ \text{meters per minute}$

---

17 A car travels a distance of 120 kilometers in two hours, express this using the word average?

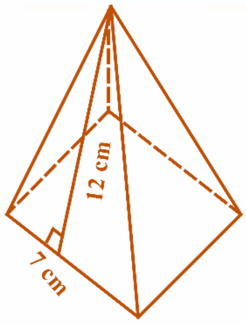
$120 \div 2 = 60\ \text{km/hr}$

---

18 Find:

ⓐ $\frac{3}{7} \div 2\frac{1}{3} = \frac{3}{7} \times \frac{3}{7} = \frac{9}{49}$

ⓑ $2.4 \times 0.02 = 0.048$



19 Find the surface area of the following square pyramid:

The area of the base = side length × itself

$= 7 \times 7 = 49\ cm^2$

The area of the triangular faces $= 4 \times \left(\frac{1}{2} \times 7 \times 12\right) = 168\ cm^2$

The surface area of the square pyramid $= 49 + 168 = 217\ cm^2$

---

20 Assuming you stored 20 boxes of goods, which is 80% of the boxes, what is the total number of boxes?

Total $= 20 \div \frac{80}{100} = 20 \times \frac{100}{80} = 25$ boxes

---

21 If the ratio between the number of boys and girls in a class is 4: 5 and the number of boys is 20 boys.
Find the total number of pupils in the class

$20 \div 4 = 5$

The number of girls $= 5 \times 5 = 25$ girls

The total number of pupils $= 20 + 25 = 45$ pupils

---

22 How much is $\frac{1}{4}$ the number 20? 5

---

23 In a mathematics exam Yousef got 38 marks of 40 marks.
Find the percentage of the marks he got.

The percentage $= \frac{38}{40} \times 100\% = 95\%$

---

24 If Murad has 40 L.E. and Ahmed Nassr has 32 L.E.
Find. The ratio between what Murad has and the total sum of money in simplest form. $40:72 \Longrightarrow 5:9$

---

25 A box of table tennis balls weighs $\frac{5}{9}$ of a kilogram. If each ball weighs $\frac{15}{81}$ of a kilogram. How many balls are there in the box?

$\frac{5}{9} \div \frac{15}{81} = \frac{5}{9} \times \frac{81}{15} = 3$ balls

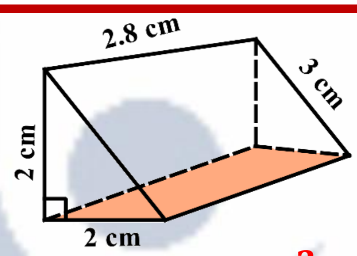
26 A merchant sold 30 kilograms of bananas at a price of 17.5 pounds per kilogram. Calculate the price of the quantity of bananas.

The price of the quantity of bananas $= 30 \times 17.5 = 525$ pounds.

27 Mona bought 5 kg of apples. She paid 45 L.E. How much money will she pay to buy 10 kg?

Unit rate $= \frac{45 L.E}{5 kg} = 9$ L.E per kg

28 Calculate the surface area of the opposite prism.



The area of 2 triangular bases $= 2 \times \frac{1}{2} \times 2 \times 2 = 4 cm^2$

The area of 1st rectangle $= 2.8 \times 3 = 4.8\ cm^2$

The area of 2nd rectangle $= 2.8 \times 2 = 5.6\ cm^2$

The area of 3rd rectangle $= 2.8 \times 2 = 5.6\ cm^2$

The surface area of a prism $= 4 + 8.4 + 5.6 + 5.6 = 23.6\ cm^2$

29 If the area of a rhombus is 48 m, and its height is 6 m Find its side length.

The side length $= \frac{Area}{height} = \frac{48}{6} = 8\ cm$